Mental Disorders of the New Millennium, Volumes 1-3

Edited by
Thomas G. Plante

PRAEGER

Mental Disorders of the New Millennium

MENTAL DISORDERS OF THE NEW MILLENNIUM

Volume 1
Behavioral Issues

Edited by Thomas G. Plante

*Dedicated to my family matriarchs—
Marcia Plante, the late Anna McCormick, the late
Margaret Condon, and Marilyn Goldfarb—who have taught
me much about the human condition and who have well-
modeled compassion for others.*

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Preface

Tragically, the daily news is filled with stories about significant and remarkable problems in human behavior. Each morning we are greeted with news reports about murder, suicide, terrorist acts, drunken driving accidents, child molestation and abduction, drug abuse, gambling troubles, gang violence, various criminal behavior, and so forth. Other frequent stories reported in the press involve the betrayal of trust among highly respected and regarded members of society. These stories include the legal, sexual, financial, and general ethical lapses of politicians, leading sports celebrities, and movies stars. Some reports include the sexual abuse perpetrated on children and teens by school teachers, coaches, and members of the clergy. Other stories focus on the stress-related troubles soldiers experience following their duty in war. Still others focus on more and more reports of what appear to be mental problems such as autism, dementia, attention deficit disorders, panic, eating disorders, and depression, among both children and adults.

These troubles are reflected in recent cover stories in magazine news weeklies such as *Time*, *Newsweek*, and *US News and World Report*. Problems such as attention deficit hyperactivity disorder, autism, Alzheimer's disease, depression, panic disorder, murder-suicide, eating disorders, and child sexual abuse, among others, have been featured many times over as cover stories in these and other popular media outlets. The fact that these topics appear frequently on the covers of these news weeklies means they must impact significant numbers of people.

Perhaps just about everyone in the United States is affected by mental illness and abnormal behavior to some extent. Many people either suffer from

one or more of the various mental disorders or live with those who do. It is likely that almost everyone in our contemporary society knows someone in his or her immediate family or circle of close friends and relatives who suffers from a significant abnormal behavior, psychiatric condition, or behavioral pattern that causes the person and his or her loved ones a great deal of stress.

Consider just a few of these statistics from our chapter contributors:

1. About 1 million people will die by suicide every year. The worldwide mortality rate of suicide is 16 per 100,000, or one suicide every 40 seconds. Fifty-five percent of suicides occur before age 44. Suicide is the third leading cause of death for both sexes.
2. About 1 million older Americans (1 in 35) is a victim of elder abuse each year, and between 3 and 5 percent of older adults over the age of 65 are or will be victims of abuse and/or neglect.
3. Epidemiological studies suggest the prevalence rate of child and adolescent depressive disorders ranges from 2 to 9 percent.
4. Over 18 million Americans suffer from some type of depression each year, and about 20 percent of the U.S. population will experience a significant depressive episode in their lifetime.
5. The number of probable adult pathological gamblers varies from just under 1 percent in the United Kingdom to between 1 and 2 percent in the United States and about 2.5 percent in Australia.
6. About 20 percent of all American women and 15 percent of all American men report being sexually abused by an adult while they were still a child.
7. About 4 percent of Catholic priests and 5 percent of school teachers have had a sexual encounter with a minor child in their care.

Clearly, mental illness and abnormal behavior touch the lives of just about all of us!

What's going on? How can it be that so many highly problematic psychiatric disorders, abnormal behaviors, and problems in living impact so many people? It wouldn't be an exaggeration to state that the vast troubles of the world stem from abnormal behavior. From ignoring global warming to terrorism, from murder to suicide, from divorce to gambling, from autism to dementia, it seems that abnormal behavior is at the root of so many challenges of our day.

Sadly, most of the books available in the field of abnormal psychology are not especially useful for the average educated lay reader. Much of the literature currently available tends to fall into two categories. The first includes academic books written by academics for an academic or scholarly audience. These books are often written in a very dry, jargon-filled, data-driven manner that is challenging for the general reader to get through. In fact, these books are often challenging for professionals in psychology and related fields to understand as well. The second category includes trade books that tend to be very simplistic

and often tell the story of someone suffering from a particular problem. These books are often located in the self-help or inspirational section in a bookstore. Books of this type are written by those who experience the particular disorder, mental health professionals who treat the problem, or journalists who tell a remarkable story about a particular case that made news. Very few books are written for the educated lay reader that balance academic, scholarly, and clinical information with a readable, engaging, and user-friendly style.

The purpose of this series on mental disorders is to help bridge this gap between academic and self-help /inspirational books written on abnormal psychology topics that impact society—those topics that potential readers see on the covers of weekly news magazines or in daily newspapers. The series focuses on contemporary abnormal behavior topics and is compiled from contributions by experts for an educated lay audience. Leading experts who study, treat, evaluate, and reflect upon these troubles and issues have been asked to write chapters for you to help you better understand these contemporary problems. The chapters are based on the most up-to-date research and practice evidence and go well beyond the information provided in popular media outlets. Hopefully, you will find that the books are highly informative, contemporary, and readable.

If we better understand the factors that contribute to these contemporary abnormal behaviors and patterns, then perhaps we can find better ways to prevent some of these problems from emerging and better evaluate and treat those who suffer from these experiences. In an effort to create a better world for ourselves and our children we must do all that we can to prevent abnormal behavior and help those who are troubled by abnormal behavior in themselves, their loved ones, and their communities. In doing so, we will be better able to create an improved world.

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The Psychopathy of Everyday Life

Martin Kantor

Who is the psychopath in your life?

Is it the motorist who is an aggressive, narcissistic, remorseless, selfish individual without kindness, empathy, altruism, or regret? The driver who honks remorselessly, bends a fender then leaves the scene, and grabs a parking space right out from under you? Is it the motorist who blames you for her mistakes? Can't we relate to the story of the individual who describes being stopped at a red light when he was hit from behind by a driver? Instead of apologizing, the driver emerged from her car and severely chastised this individual for impeding the flow of traffic. "It's my fault" and "I am truly sorry" were no more in her vocabulary than they were in the vocabulary of the lawyer who absconded with his client's escrow money or the CEO who bankrupted his company so that he could gratify his personal, very expensive, appetites.

Is it the dentist who for fame, money, and power evolved crazy theories with more gusto and greater ease than sensible ones, and who even came to believe in his theories himself? This man was able to build a busy practice and was more than able to pay the mortgage on his beach house by revising old fillings made of mercury, claiming that they caused blood poisoning that showed up in the form of Chronic Fatigue Syndrome. When the regulatory agencies caught up with him, and when his patients read the adverse publicity about the questionable scientific basis of mercury filling poisoning, he lost most of his practice. So he had to find another way to make money. He then started recommending that all his patients undergo what he called preventive dentistry, which involved grinding down a whole tooth instead of simply filling a cavity, giving as his reason, "That way, the tooth will never become decayed again." His motivation was not to preserve teeth. His motivation was to enhance his bottom line.

Is it your psychiatrist? When in residency a particular psychiatrist often made up cases for presentation at a conference. Afterwards he got through the licensing exam by paying for the answers available on the underground. When in private practice, he allowed himself to be bought with cheap gifts and free lunches by those attempting to convince him to prescribe certain medications and not others. Also, he would only prescribe a medication made by a drug company in which he had a financial stake. He worked on a panel deciding which drugs were safe without recusing himself, as he should have, on the grounds that he received money from the drug companies that made the drugs he was recommending. When referring his patients out he would send them not to the best person available but to his golfing buddies. While he himself refrained, he turned a blind eye when his colleagues had sex with their patients, in private agreeing with them that that was sometimes justified as a form of therapy. At times he would sleep during the session and report his revealing dreams back to the patient claiming that that was a form of therapy. One of his specialties was treating anxiety, but really what he was doing was pushing drugs, for he would write literally hundreds of prescriptions for benzodiazepines without first taking a complete medical history or doing the requisite mental and physical examinations. Many times he cheated the insurance company by lying about the amount of time he spent with a patient. He also practiced alternative forms of medicine where he inappropriately prescribed nutritional supplements alone for ailments that required conservative medical treatment then deified his essentially trivial interventions as powerful curatives, and to ice the cake, lobbied politically to have his treatment approach formally recognized and legitimized so that the insurance companies would pay for it.

Is it your spouse? A consumer registered his car to a phony out-of-town address in a state with lower car insurance, tapped into the cable line to get free cable, and when the cable company gave him premium channels without charging him for them never mentioned it so that he could continue to get the service without having to pay the bill. He would often buy things, use them, and then when he no longer needed them return them to the store. For example, once when he was boarding his brother's dog, he bought a cage from a pet store, used it for the few days that the dog was with him, and then brought it back. When he bought electronic equipment and dropped it he would return it to the store claiming that it was defective, and he often brought back plants he had himself killed saying that they simply had died because they were defective. When a store had a big sale he would buy several items then resell them on eBay. When a policeman caught him speeding, making an illegal turn, or using a cell phone when driving, he would falsely claim an emergency that required his immediate presence. Joining the paying crowd at intermission he would

sneak into a show or concert for the second act. In bookstores he would peel back the shrink wrap from books so that he could read them without buying them, and he would borrow CDs from the library then make copies of them and sell them to his friends. He would send letters without stamps, using as the return address the address of the recipient, hoping that the letter would arrive at its proper place as "returned." He would regularly drop his personal garbage in a public bin, use the supermarket as a smorgasbord—eating his way through the olive bar, underreport his income on his tax forms, purchase stolen goods after buying into the excuse that they fell from the back of the truck, and sneak into the gym—after telling the person at the front desk that he was just there to meet someone at the cafeteria he would go into the bathroom, remove his outer clothes revealing his gym clothes underneath, then unabashedly proceed to the work floor. He would alter a medical insurance form after his doctor filled it out so that he could increase the benefits due him, substitute stickers on supermarket items so that an item would check out for less, and on more than one occasion, he deprived a real estate agent of an earned commission by teaming up with the buyer to purchase the property behind the agent's back.

Or is it you? A psychopathic consumer gave the lie to the maxim that the customer is always right. For he lied, cheated, and stole from the merchants he dealt with, which he did for any number of financial and personal reasons. He not only wanted to pay as little as possible for desirable merchandise, he also liked the fun and excitement of putting something over on the establishment. He borrowed many a book from the library then "forgot" to give it back. When leaving a hotel he would regularly steal the towels, and when leaving a restaurant he would frequently try to nab any souvenir dishes he could lay his hands on. He would often say he had a dinner or hotel reservation he hadn't actually made, hoping to get the restaurant or hotel to correct an error they didn't make by offering him space he didn't reserve. He always corrected waiters or waitresses when they overcharged him on a check, but he never corrected them when they made a mistake in his favor. When he thought he could get away with it he would eat dinner at a restaurant then complain about the food or service (the old-time comedian's "Waiter there's a fly in my soup") to get comped, to leave a lesser tip, or both. He frequently sent out letters of complaint about a product in order to get the company to apologetically send him free coupons good for purchasing more of the same. When applying for a job he regularly omitted negative information about his past work history, and on credit applications he would significantly inflate his income. In other circumstances he would under-report his income, as he once did in order to gain admission to a middle-income housing project. Eventually he put all his assets into a corporate name so that he would be eligible for benefits available to those with a low income, and once he

even tried to apply for Supplemental Security Income benefits on the grounds that he was completely impoverished.

Most of us will recognize friends, family, acquaintances and strangers we read about in the daily news in these composite examples. Yet the extant scientific literature on psychopathy hardly mentions such individuals at all. When it comes to psychopathy, the available literature reveals only a few of its faces. It tends to focus exclusively on seriously ill, truly evil people like John Wayne Gacy, David Berkowitz, and Saddam Hussein, but it neglects the lawyer for whom winning a case is more important than discovering the truth; the ad writer who uses fragments of information to put a good face on a bad product; the doctor who, because he owns stock in the company that produces the drug, touts a costly medication over one that is less expensive but equally effective; the politician who sells out for a mess of concrete in the form of the new driveway for her house, installed in exchange for voting for the contractor's new construction project before the planning board; and the CEO of a major corporation who decides not to insure his employees, knowing that the taxpayers will have to pick up the bill for their medical care, so why spend the extra dollars?

These are the individuals I call "the psychopaths of everyday life." Though their problems are both widespread and devastating in their effects, to date they belong to a poorly understood group whose emotional difficulties are barely recognized, hardly fathomed, and rarely treated. To the best of my knowledge, with the exception of Martha Stout's recent book *The Sociopath Next Door*,[1] written more for the layperson than for the therapist, these individuals have been almost entirely neglected by the scientific establishment. When they are mentioned at all, they are referred to in passing, whereupon the focus predictably shifts rapidly to seriously disturbed psychopaths, and especially to those seriously disturbed psychopathic individuals that form that subgroup of patients we diagnose as having an antisocial personality disorder.

To understand and treat the psychopaths of everyday life we first must distinguish them from the severe psychopaths, from whom they differ significantly in style, causation, incidence, and effect. *Descriptively*, while mild psychopathy closely resembles a personality disorder, severe psychopathy more closely resembles a psychosis. *Dynamically*, mild psychopaths are less aggressive and more guilt-ridden than their more severe counterparts. *Therapeutically*, mild psychopathy has both a much more benign course and a better prognosis than psychopathy that is severe. Also, unlike the more severe forms of psychopathy, which are often treatment resistant, mild psychopaths can, with the right approach, often be helped significantly through psychotherapy.

Not all observers believe that such an entity as mild psychopathy even exists. For example, Hans Toch says that being a mild psychopath is like being a little bit pregnant (p. 144).[2] Along similar lines, Henry Pinsker (personal communication,

2004) suggests that the term psychopath has become too broad and dilute to the point that it has lost its specificity, having been applied to anyone who is an opportunist or a criminal.

Other observers do recognize mild, partial psychopathy. The blurb in the back of Donald W. Black's book *Bad Boys, Bad Men* includes under the rubric of psychopathy "black sheep . . . con men, or misfits [who] shirk everyday responsibilities, abuse drugs and alcohol . . . and lash out at family members," and in the book itself Black speaks of "successful bad boys." As Black says, "Antisocials are not just muggers, rapists, and violent assailants. They sometimes are embezzlers, tax evaders, fraudulent business men, corrupt stock brokers, and conniving attorneys . . . who habitually commit white-collar crimes" (p. 152).[3] Robert D. Hare calls mild psychopaths "white-collar psychopaths" and says of them, "These individuals are every bit as egocentric, callous, and manipulative as the average criminal psychopath; however, their intelligence, family background, social skills, and circumstances permit them to construct a façade of normalcy and to get what they want with relative impunity" (p. 102).[4] Although the psychopaths described in Hervey Cleckley's *Mask of Sanity* are almost all severely ill, on occasion, without much focus or elaboration, Cleckley discusses mild psychopaths who "are able to make some sort of adjustment in life" (p. 211).[5]

I believe that the mild psychopaths like the ones about which these observers speak are still psychopaths, and they are more numerous and in some ways even more dangerous to society than severe psychopaths. For by lying, cheating, and swindling on a massive scale their mayhem deprives many victims of a great deal. While it is true that these individuals are rarely violent to persons, they can do a great deal of violence to the dignity, identity, and bank accounts of many people. They rarely take lives, but they do often ruin them.

I continue my discussion of the *psychopathy* of everyday life with a general discussion of the *psychopathology* of everyday life.

THE PSYCHOPATHOLOGY OF EVERYDAY LIFE

By the term "psychopathology of everyday life" I mean thought and behavior centered somewhere near the middle of a continuum where "normal" is on the left of the mean and pathological is on the right. However, especially when it comes to personality disorder, it is often difficult to answer the question "What is normal and what is pathological?" The *DSM–IV* (The American Psychiatric Association's *Diagnostic and Statistical Manual*) notes that "Personality Disorders represent maladaptive variants of personality traits that merge imperceptibly into normality and into one another" (p. 633)[6] and John M. Oldham and Lois B. Morris note that personality disorders are "exaggerations of . . . personality styles that are present to varying degrees

within every individual. It is the *quantity* of each personality style along a continuum, not its quality, that tends to spell problems in life" (p. 21).[7] When it comes to psychopathy, I believe that "normal" opportunistic individuals who place personal gain in importance above truth or the collective good, consider winning the only thing worthwhile, and twist logic into obtaining personal advantage by so skillfully selecting and misrepresenting facts that even they themselves come to believe in the truth of their distortions are on the left of the continuum, where on the right are those "pathological" individuals we formally identify as full psychopaths based on their having crossed the border into the realm of serious lying, cheating, and criminality completely unfettered by anxiety and totally unbounded by conscience.

In differentiating abnormal from normal we have to leave room for personality differences. All of us are not alike, so behavior such as introversion, or even deviousness, is more pathological for some than it is for others. It is also important to distinguish abnormal behavior from behavior that looks abnormal but is normal, because under the circumstances it is both predictable and universal—for example, on vacation or at a special time of the year for which we have coined such terms as "spring fever," "midsummer madness," and "winter doldrums," suggesting that cultural allowances are made for intermittent, for example, seasonal, deviation from year-round norms. Specific external (situational) circumstances also can make a substantial difference. For example, if you are an accountant, a checking ritual makes sense in your job (i.e., is reactive to or part of the job). If you are an FBI agent, a formal, unbending, controlling, ungiving personality with paranoid features can represent not a style of illness but an appropriate or even creative manifestation of health. Additionally, defining social deviance is always difficult because variations exist from society to society. For example, what would be abnormal in a collectivistic society might in an individualistic society pass for perfectly acceptable behavior.

Determining motive helps us distinguish between abnormal and normal. For example, it helps us distinguish between the serious psychopath—the bad bank robber who intends to be an enemy of the state—and the nonpsychopath—the latter-day good Robin Hood who by stealing from the rich and giving to the poor intends to be a friend of the people.

Differentiating adaptive from maladaptive personality traits also helps us distinguish abnormal from normal. Personality *traits* are the building blocks of both (normal) personality *style* and (pathological) personality *disorder*. Personality traits can be compared in subject matter and style to proverbs and other related sayings, such as maxims, and we can think of them as a lifetime overvaluation and realization of a proverb or maxim that takes the form of

an overvalued idea that grabs hold and guides thought and behavior. Because personality traits are like proverbs and maxims, proverbs and maxims can serve as headlines to the story of one's personality traits, and ultimately of one's personality type or style. As such, these apt, pithy headlines, summaries of the core attitude of an individual, are a good indication of the individual's personality style. Thus the individual who lives by the formulations "Cleanliness is next to godliness" and "Never postpone to tomorrow what you can do today" tends to be an overly scrupulous but still normal obsessional type. "We have nothing to fear but fear itself" describes the propensity for denial found in those with a hypomanic bent. The maxims "There's no business like show business," "A sucker is born every minute," and "Caveat emptor" are the rallying cries of the individual with a psychopathic personality style.

The personality traits of the normal individual are more adaptive than the personality traits of the individual who is abnormal. An example of an adaptive personality trait might be ambitiousness, and an example of a maladaptive personality trait might be self-destructiveness. Depending on context and content, the same trait can be either adaptive or maladaptive. The personality trait of *adaptive* evasiveness is illustrated by the behavior of the familiar political figure with a psychopathic bent who evaded one question by answering another. When asked, "When is this war we are in going to be over?" he answered, "We have to persevere and pursue the enemy for as long as it takes to win." This individual ducked by answering not the question he was asked but instead a somewhat related question: "Should we give up now or persevere and fight to the end?" In contrast, the personality trait of *maladaptive* evasiveness is illustrated by the behavior of the individual at the center of a widely publicized case who was punished not for her initial misdeeds but for lying about them to the government.

Statistically speaking, few individuals look markedly abnormal. The vast majority of the *abnormal* individuals that we run across in our daily lives are suffering from mild psychopathology, making them *seminormal*. In the case of psychopaths, seminormal or mild psychopaths have to be differentiated on the one hand from normal individuals who are merely somewhat morally challenged and on the other hand from individuals suffering from severe psychopathy who have a diagnosable antisocial personality disorder.

Theodore Millon gives the name "nonantisocial aggressive personality" to a category of individuals who fit the description of seminormal psychopathic individuals (p. 181).[8] Hare, as previously noted, refers to mild psychopaths as "white-collar psychopaths" and speaks of "subcriminal psychopaths" and "successful psychopaths."[4] Robert I. Simon calls mild psychopaths "passive psychopaths," whom he goes on to describe as "individuals who] tend to be parasitic and exploitative of others [unlike the] aggressive psychopaths [who] commit major

crimes" (p. 27).[9] Stout speaks of the sociopaths next door.[1] I call these individuals variously mild or partial psychopaths or the psychopaths of everyday life.

Seminormal individuals are rarely salt of the earth people, and their personality traits are mostly negative and maladaptive. This rule, however, has exceptions, notably the fact that being excessively clean occurs perhaps as often as being excessively dirty.

In seminormal individuals the past and present manifestations of the disorder, while still overt, are moderately attenuated. For example, speaking of the past manifestations of psychopathy, the *DSM–IV* suggests that as adolescents adult psychopaths routinely present with signs and symptoms of a conduct disorder.[6] But while seminormal psychopaths may have been dishonest adolescent girls and boys who lied, cheated, and stole, they were probably not recklessly impulsive truants who ran away from home, serious brats who regularly acted in an intimidating aggressive manner, devilish fire setters, or sadists who seriously hurt and maimed animals. If they were arrested it was more for misdemeanors than for felonies, and if they were punished it was not by being jailed but by being fined.

As for now in the 21st century, as adults seminormal individuals may have almost as many difficulties as those people we officially recognize as disordered. Negative thoughts and behaviors such as selfishness prevail over positive ones such as caution, honesty, and altruism. These individuals do make waves, ruffle feathers, and call significant attention to themselves. However, their difficulties, for one reason or another, are undeveloped or otherwise held in abeyance. For example, seminormal psychopathic individuals retain some capacity to feel love, and even pity. These emotions can kick in at the last minute to slow the process down and keep it from taking over completely, as these individuals feel sorry for those they are about to hurt, and in response, they go a bit easy on them. Seminormal psychopaths also retain a modicum of guilt. For example, they might apologize to those they wronged, even though the apologies have no practical effect on their subsequent behavior. Furthermore, their deviant behavior is not persistent and repetitive. One episode might subside long before another appears. One year a seminormal psychopath cheats on his final exam. Later in life he cheats at cards, still later on his taxes, and later still on his wife, so that the individual traits even when serious in and of themselves do not completely deform, distort, and usurp the entire personality by becoming a regular and predictable behavioral feature.

Seminormal individuals also display pathological traits selectively, in some areas but not in others, with the result that their disorder is not characterized by a full expression. Consequently, their problems, only showing in certain facets of their thoughts and behaviors, are limited to certain arenas and involve only one or two parameters of functionality. For example, one seminormal psychopath stole from work in order to better provide for his wife and children at home, making him an embezzler who was also, however, a loving husband and father.

Seminormal individuals manage to turn a maladaptive trait such as cheating into an adaptive trait such as getting ahead regardless of the cost. Indeed, when it comes to seminormal psychopathy, being successful may be as much the rule as the exception. Successful seminormal psychopathic individuals still function effectively and creatively within the mainstream, but they do so in a clearly psychopathic mode.

Seminormal individuals also have a disorder that is reactive, that is, it is a more or less transient response to external, often traumatic, life events. Included here are those seminormal psychopaths who steal not for fun and excitement or because they are so insatiable that they want it all even though they already have enough but because they have little to eat. In cases like this the psychopathic symptoms can be transient and are likely to improve with an improvement in circumstances.

Finally, seminormal individuals retain a measure of control over themselves to the extent that they can keep their worst aspects from emerging and taking over their personality completely and destructively. For example, a seminormal psychopath's professed goal was to be more like a saprophyte than like a parasite. To this end he used people for his nefarious ends but deliberately steered clear of harming them seriously. He would cheat on his expense account at work and embezzle from his company, but though he could have embezzled his company dry, he stopped short of that. In his interpersonal relationships he was narcissistic and lacked empathy, but he would never destroy relationships completely. Instead he would deliberately set out to maintain them, although he did that only for purposes of manipulating them.

My discussion next turns from "What is normal, and what is seminormal?" to "What is psychopathy?" (Psychopathic Personality Disorder), whether mild, moderate, or severe.

PSYCHOPATHY

One can define psychopathy according to its generally accepted core dynamics: antisocial behavior in the presence of a relative or absolute absence of anxiety and guilt and an inability to experience remorse; an incapacity for feeling empathy and an inability to be altruistic; and an absence of clear and understandable human motivation.

Alternatively, one can, as does the *DSM–IV*,[6] define psychopathy behaviorally, more in terms of social deviance than in terms of core personality difficulties. Behavioral constructs emphasize maladaptive behaviors such as unpredictability, impulsivity, irresponsibility, ruthlessness, and criminality. The major advantage of defining psychopathy behaviorally rather than dynamically is that interrater reliability is greater, for it is easier to agree about what constitutes criminality than it is to agree about what constitutes lack of empathy. However, there are

several disadvantages to using strictly behavioral criteria. They tend not to go to the heart of the matter, they tempt the making of value judgments, and they are highly dependent on social standards that vary both from society to society and within one society, leaving us without a fixed platform in space from which to measure deviation: bad from good, acceptable from unacceptable, social from antisocial. Who is the psychopath? The individual who sneaks across the border through the dessert to get into the United States, the posse patrolling the borders and mercilessly hunting down the trespassers, or the person who puts water out so that the "illegal immigrants" don't die of thirst in the hot sun? Who is the psychopath? The gang member in a crime-ridden neighborhood or the person who refuses to go along and join the gang? Technically speaking, as bizarre as it sounds, in Nazi Germany the SS guards would not, according to strictly social definitions, be the psychopaths. The psychopaths would be the people who, in defiance of regime policy, failing to conform to social norms, tried to save the Jews. For most teenagers, and in the teenage societies that they, and some of their adult compatriots, form, being countercultural is not a problem but a goal. The *DSM–IV* criterion "disregard for and violation of the rights of others"[6] is especially awkward because to a great extent rights are culturally dependent. In a totalitarian, collectivistic society, it is not antisocial but prosocial to deprive others of the right to speak freely, and those who insist on demanding their rights in such a place are the ones most likely to wind up branded as psychopathic enemies of the state. The Boston Tea Party would in some circles today be considered to have epitomized antiauthoritarian acting out, and it is ironic that according to legend the repressive dictator Joseph Stalin considered the modernistic composer Dimitri Shostakovich to be the one who was the psychopath!

Another disadvantage of using behavioral criteria to define psychopathy is that actual psychopathic behavior is often hidden. After all, these are individuals who are famously untruthful. They also know how to manipulate mental health professionals, and the entire system, to create the impression that they behave well, or that, if they behave negatively, that their bad behavior is justified by circumstances.

Perhaps the most serious problem associated with defining psychopathy behaviorally is that behavioral definitions by nature tend to emphasize the negative over the positive features of a disorder, for example, psychopathic criminality over psychopathic cleverness. But the socially valued behavior of the doctor who speaks euphemistically (that is, who lies) in order to put a good face on a bad prognosis is in a way just as psychopathic as the behavior of the quack healer who uses sophistic skills to sell the public an entirely worthless nostrum. It would appear that emotionally disordered behavior has its beneficial side and that not all aspects of a personality disorder, or even the personality disorder

itself, are self-destructive and maladaptive. Therefore, the concept of positive psychopathy does not actually challenge our basic concept of what constitutes a personality disorder.

It is not surprising then that many people who are considered successful in business are actually suffering from what can be termed a "temporally effective" psychopathy—one in which well-defined sadistic and amoral elements are efficiently controlled because out of control they could compromise everything that has been gained. When psychopathy takes this form, not of negative actions but of positive interpersonal, social, and creative display, it begins to look more like a virtue than a vice. Indeed, psychopathy is so often able to be harnessed for the appropriate service of self in a socially useful activity that many of us wish we were more psychopathic than we already are. Conversely, we all sometimes need to think and act a bit like a psychopath, for not being a little psychopathic can constitute an impediment that makes it harder for us to protect our well-being and to get ahead in the world. Not being able to tell a white lie to spare others' feelings or to save our own skins when we are cornered can, after all, be detrimental to our ability to function—personally, socially, professionally, and politically. It is not surprising then that many of us, secretly identifying with psychopaths, admire and want to become like them. At least in our dreams we find ourselves enjoying being hardhearted. Now, as we see it, with fewer scruples holding us back we could reach the highest pinnacles of achievement. Now, as we see it, we could achieve more by functioning in a less than guilty fashion, unconcerned about our wrongdoing, able to victimize others with little or no regrets—for now we are thoroughly rid of our inhibiting scruples and completely unfettered by our retrospective regrets.

Examples of positive psychopathy in our society include the pleasant, harmless, acceptable, and even fun psychopathy of Fritz Kreisler, the violinist and composer who wrote music in the olden style and then, rather than attributing it to his own hand, said he had found it; and that of the composer Charles Ives, who, otherwise not obviously psychopathic, may have backdated his compositions to make them seem more avant-garde. Less acceptable but still within the realm of what is generally tolerated is the psychopathy of the realtor who becomes rich and successful by selectively underplaying the flaws of subpar properties in order to inflate their prices. For example, in calculating the amount of rent a small apartment complex brings in, this realtor simply "forgot" to say that one of the tenants was a nun who paid considerably less than market-value rent, had a lifetime lease, and had no plans to leave. Many successful salesmen can point to their psychopathy as the real reason for their success. This was the case for a patient of mine, a life insurance salesman, someone who had previously signed himself into a mental hospital just to beat a drug rap. During

treatment with me he tried to take out a life insurance policy on my life to protect his investment in his therapy in case I died or was killed—a clever, though self-serving, and, for me at least, potentially dangerous, idea, but one that illustrates the close relationship that often exists between narcissism, psychopathy, and creativity.

After discussing psychopathy in this general way I focus my discussion on mild psychopathy—the psychopathy of everyday life.

THE PSYCHOPATHY OF EVERYDAY LIFE

Mild psychopaths, the psychopaths of everyday life, appear to the casual observer to be upright, honest citizens whose reputation is "merely" marred by a touch of dishonesty. They can be differentiated from patients suffering from severe psychopathy, particularly Antisocial Personality Disorder, as follows:

> Patients with an antisocial personality disorder resemble hardened criminals. Their crimes often involve directly aggressive acts to individuals and go beyond mayhem to murder.

In contrast, mild psychopaths are more like ordinary schemers and conners. Their crimes tend to fall into the gray area of criminality, such as the crimes of opportunity of ad writers who speak part truths that effectively mask whole falsehoods, emphasizing the positive and eliminating the negative to sell a nearly worthless product—quite possibly still stealing more overall from an unsuspecting and gullible public than all the armed robbers of this world collectively take from banks or than crooked CEOs steal from large companies.

> Patients with an antisocial personality disorder are commonly found in jail or in forensic psychiatry units.

In contrast, mild psychopaths are often found in the courts. If they go to jail it is often because they miscalculated or experienced a run of very bad luck.

> Patients with an antisocial personality disorder mostly lack discernible anxiety, are short on empathy, and are incapable of feeling guilt or remorse, either now or after the fact. When convicted of a crime they do not show guilt or remorse because they so lack the ability to know what guilt and remorse feel like that they cannot even fake it.

In contrast, mild psychopaths often become somewhat anxious, are capable of feeling some guilt and remorse, and retain some ability to empathize. In

court mild psychopaths have enough residual empathy and ability to feel guilt and remorse to allow them to figure out how to apologize to the people they hurt—although they usually do so less because they really mean it and more because they want a shorter sentence.

> Patients with an antisocial personality disorder tend to be extremely impulsive individuals.

In contrast, mild psychopaths are often quietly and resolutely calculating and retain the desire and the ability to plan ahead.

> Patients with an antisocial personality disorder completely lack loyalty.

In contrast, mild psychopaths often retain a sense of loyalty to select groups— the familiar "honor among thieves."

> Patients with an antisocial personality disorder tend to be completely oblivious to feedback, without audience sensitivity or much if any concern about the effects of their actions on others—all part of their tendency to show poor conditionability.

In contrast, one can often approach, get through to, and influence mild psychopaths, at least to an extent. While they could care more, it's not entirely true that they couldn't care less.

> Patients with an antisocial personality disorder hurt people for the sheer fun of it.

In contrast, mild psychopaths often hurt people as much for profit as for fun. They are more opportunistic than sadistic. They may enjoy making their victims writhe but they also enjoy making themselves rich. (An important caveat, as the *DSM–IV* notes, is that "Antisocial Personality Disorder must be distinguished from criminal behavior undertaken for gain that is not accompanied by the personality features characteristic of this disorder."[6] Thus while a psychopath would by definition be an opportunistic crook, an opportunistic crook would not necessarily by definition be a psychopath.)

> Patients with an antisocial personality disorder usually show little or no improvement as they get older.

In contrast, mild psychopaths may, and often do, grow up and out of their psychopathy. They frequently have an epiphany later in life where they suddenly and often unexplainably begin to feel guilt and remorse for their past actions to

the point that they actually achieve a measure of reform. This rule also has its exceptions, for mild psychopaths can stay the same or get worse. For example, the "mere" antics of Truman Capote's youth seem to have hardened into a serious mistreatment of his best friends, whom he badly hurt by criticizing and exposing them—virtually, it would appear, for a combination of professional and personal gain, and perhaps also to have some great immoral fun at their expense.

> Patients with an antisocial personality disorder produce mainly negative responses in us. We invariably dislike, refuse to tolerate, and are afraid of the serious psychopath.

In contrast, we (too often) tolerate, embrace, and even love the mild psychopath, taking him or her into our hearts and homes—one reason why we call these individuals "confidence men" and view them not as subhuman but as superior life-forms.

> Patients with an antisocial personality disorder often live as outsiders in society.

In contrast, mild psychopaths are often "insiders," in many senses of the term, including its use in the phrase "insider trading." Instead of removing themselves from people and society, mild psychopaths keep close relationships going with others, mainly, however, so that they can manipulate them for their own ends. We might say that while patients with antisocial personality disorder, as well as all serious psychopaths, remind us of (dangerous) outlaws, mild psychopaths remind us of (troublesome) in-laws. That is, they are less like hard-core criminals and more like those difficult people we all know who live among us spitting on the floor, throwing apple cores out of the windows of moving cars, blasting their horns at drivers who don't get moving when the light changes, turning up their personal stereos on public conveyances, yelling into their cell phones—calculatedly oblivious to the discomfort of others around them, or putting their dogs to sleep because they bark too much. In a typical difficult behavior of a mild psychopath, a man breaks into a line of people waiting to check their coats. When his wife reminds him, "There is a line," he retorts, totally oblivious to her concerns or the feelings of the others he has cut off, "I know. I'm on it."

> When patients with an antisocial personality disorder are caught and exposed, they make things worse for themselves by becoming angry, vindictive, and reflexively even more confrontational.

In contrast, mild psychopaths seem to know how to avoid being chastised and punished and know just what to do to get out of a difficult spot. When caught in the act they tend to become reflexively more ingratiating.

Mild psychopaths are not, however, entirely benign. Behaviors characteristic of the antisocial such as selling drugs to children or joining murderous gangs are not entirely unknown in the mild psychopath, and some mild psychopaths even wind up being admitted to mental hospitals. While mild psychopaths are rarely extremely violent or maim or kill with knives and guns, they can, and often do, murder people, although they usually do so indirectly. For example, in a not atypical scenario they might skim money off a project and put up a building that ultimately collapses, injuring or killing its occupants.

Mild psychopaths can also be inhumane in the extreme. As con artists and confidence men, they can fool, and even destroy the lives of, millions. In the ranks of the widely destructive we find the ad writer who fleeced hoards by touting the superiority of one aspirin over another based on an elusive purity or another value falsely claimed to be exclusive, doing so in terms carefully calculated not to break the law; the ad writer who got the poor to spend more than they could afford by convincing them to overspend during a discount sale, persuading them that they would save more if they spent more; and the ad writer who compromised many people's eyesight by promoting a cure for nearsightedness based on the following flawed hypothesis presented as scientific truth: glasses never cured anyone's eyesight; since the myopia of people who wear glasses invariably gets worse, it follows that glasses cause myopia, so throw away your glasses and, for a price, I will show you how you can see perfectly well without them. Belonging here too are the actions of the politicians who ultimately harm us all by destroying perfectly good opposition candidates with attack ads that make victims not only of their opponents but also of the truth; reporters and book reviewers who destroy reputations by omitting facts that might save or enhance them; realtors who steal other realtors' exclusive listings then offer customers cut-rate commissions to make the switch to them; crooked telemarketers who sell worthless products; Internet phishers who empty bank accounts and steal identities; shady corporate CEOs who fake balance sheets to artificially enhance the value of their stock; office workers who regularly call in sick when they are well, rationalizing their behavior as taking a mental health day, or who cheat on their time cards by leaving early then getting someone else to stamp the cards for them, or who steal large amounts of office supplies then resell them on eBay; and used-car salesmen who turn the odometer back or sell cars that have been in a wreck or flood without even mentioning their background.

In conclusion, however unfortunate, a certain amount of psychopathic opportunism, greed, distortion of reality, bullying, and cheating must be taken for granted in the world. Even the most "normal" individuals among us are mildly psychopathic. This is because to some extent we all use psychopathic methods to cope, achieve, and succeed. All of us have the potential to be aggressive when that suits us, and all of us have a lax enough conscience structure to make us

selectively morally reprehensible—selfish, unloving, and unempathetic, guilt free and at will, when that suits our purposes. All of us can be unreliable when we see an opportunity to feed ourselves a little pleasure or ill-gotten gain. All of us can be much too willing to compromise our ideals, for, as they say, "Every person has his price." However, while when the lure and prospect of instant gratification looms we can all become evasive, tricky, and dishonest, some of us, the normal individuals and milder psychopaths among us, recognize and control our potential for deviltry better than others. Either a compulsive morality kicks in to set limits on how evil we permit ourselves to be or our better judgment kicks in and we watch what we do simply because we are afraid of getting caught.

THERAPY OF THE MILD PSYCHOPATH

Individual Therapy

Most clinicians view psychopathy as an untreatable disorder that responds neither to traditional therapeutic methods nor to untraditional treatment approaches. For example, Cleckley states that "I do not have any dogmatic advice as to a final or even a satisfactory way of successfully rehabilitating psychopaths,"[5] and Hare says that "with few exceptions, the traditional forms of psychotherapy . . . have proved ineffective in the treatment of psychopathy. Nor have the biological therapies, including . . . the use of various drugs, fared much better."[4] Hare even suggests that treatment can sometimes actually make these individuals worse.

In a dissenting view, Otto F. Kernberg outlines a psychoanalytically oriented method he believes to be effective for treating psychopaths.[10] Black suggests a specific method that focuses not on "why behaviors developed" but on "how they can be eliminated" and recommends cognitive therapy that focuses on exposing and challenging cognitive distortions such as my "desires are adequate grounds for [my] actions" (p. 152).[3]

I believe that while severe psychopathy can be at best very difficult to treat with any form of therapy, mild psychopathy is treatable using traditional individual approaches, so long as these are specifically adapted for dealing with the special problems these patients present.

That does not mean that even the mildest of psychopaths are easy to treat. Even mild psychopaths tend to be uninsightful individuals who deny their illness. What awareness they have of the nature, depth, and extent of their disorder tends to be dim at best. So they might say, "I am not sick" or "If I am sick it's because of what the world did to me." Many also have an aggressive side to them that puts some therapists off, as well as a narcissistic character structure

that leads them to believe that they do not have to change because they are just fine the way they are. Many hesitate to do the hard work that effective therapy entails, and few willingly relinquish the pleasures, rewards, and excitement of acting out, such as the fun they get from defeating authority as they sadistically watch their do-gooder therapists squirm and fail in their crusades to help them become more socialized.

However, the outlook improves somewhat when:

1. Unsuccessful by chance or self-destructive by design, they find themselves in trouble with society or the law and have to attend and show progress in therapy.
2. They retain a modicum of guilt and self-loathing.
3. They are lonely because material gain has come at the expense of the loss of friends and family—those fleeced and those critical of the individual's antisocial behavior.
4. They have finally become aware of the inefficiency involved in attempting to get something for nothing.
5. They have finally become aware of how they have failed to meet their potential and now want to go from being social misfit to pillar of society.
6. They have been coping psychopathically with a series of unfavorable circumstances that are now behind them.

In my opinion, these individuals can benefit the most from an *eclectic* form of treatment that emphasizes both early and here-and-now issues and employs a combination of psychodynamic, cognitive-behavioral, and interpersonal approaches—simultaneously resolving unconscious conflicts; recognizing and correcting cognitive distortions; correcting behavior by both positive and negative enforcement, that is, with both encouragement and admonition; and working through interpersonal difficulties. Some therapists have noted that mild psychopaths get better on their own upon becoming depressed, which they may do after getting into trouble with other people in their lives or with the law. These therapists have therefore set out to convert psychopathy into depression and to then use the depression as an impetus for change and a focus of treatment. One therapist successfully induced depression in a psychopathic patient by treating him nonaffirmatively. She undermined the patient's narcissistic defenses by asking him such confrontational questions as "Who do you think you are that you are entitled to get something for nothing?" or an even harsher "What makes you feel that you are really a special somebody, not a big nobody?"

Other therapists, disagreeing, prefer to use a more supportive approach. Their goal is to build a positive, long-term, therapeutic relationship that will at a minimum tide these individuals over the rough spots in their lives. These therapists

may be satisfied to just keep the patient alive and out of trouble while waiting for the disorder to remit spontaneously. Such therapists affirm the patient. They view him or her not as bad but as troubled, and instead of responding to the inevitable flare-ups and relapses with negative behavioral correctives such as "You'll be discharged from (i.e., thrown out of) therapy if you continue this way," they focus on offering the patient positive feedback and special incentives and rewards for doing well, such as a day pass from the hospital to go shopping as a reward for sticking with and doing well in occupational therapy.

An important caveat is that therapists who respond to the usual psychopathic cons and manipulations by becoming morally judgmental and punitive are not likely to help their patients. More likely they are going to make them worse.

Milieu Therapy

Briget Dolan, while holding out little hope for individual therapy, feels more sanguine about group and milieu therapy taking place in a democratic therapeutic community without a hierarchical structure.[11] This community emphasizes group therapy, and most of the discipline is taken over by a governing body made up of patients, of course always under staff supervision.

Family Therapy

Working with the family is an integral part of treating psychopathic patients. The therapist can double-check the patient's history and monitor the patient's progress with a view to making certain that he or she isn't continuing to behave badly and then covering up. The therapist can also help the family recognize, learn about, and accept the diagnosis of psychopathy. Most families can use useful therapeutic advice on how to deal with and cope with the psychopath, in particular on how the family members can protect themselves from the psychopath's abusive verbal, emotional, physical, and financial assaults. The therapist can also help the family plan for a situation that doesn't improve. For example, the therapist might advise the family that it can be a bad idea to leave a psychopathic child an inheritance outright and that a much better idea is to provide him or her with an annuity.

Black, emphasizing the importance of helping those "who [every day] live with ASP . . . in someone they love," stresses the importance of having the family "take . . . a stand against antisocial behavior" (p. 152).[3] Families of adolescent children with a conduct disorder often need to be helped to strike a healthy balance between being too permissive and being too punitive with the child. Overly permissive parents need to strongly and unambivalently set limits that discourage their children from acting out antisocially. They should avoid treating their

children like infant kings and queens to the point that they bring their children up believing that their parents, and the world, owe them everything. As examples, parents should discourage their children from faking being sick in order to stay out of school, forbid their children to associate with bad companions, and make certain that their children are not hiding drugs or bomb-making equipment in their rooms. They should avoid reflexively rescuing their children each time they get into trouble and instead allow them early on to get a taste of the negative consequences of their antisocial actions so that they do not grow up believing that they can get away with just about anything.

However, parents should not go to the opposite extreme and deprive their children unduly. Parents who do that can turn their children into adults chiefly or only concerned with making up for previous lacks by any means whatsoever. I have seen cases where children became rebellious as their way to cope with excessively controlling, punitive parents. Such children first parentalized society then behaved antisocially to get back at their parents—by keying cars, destroying their neighbor's lawn ornaments, egging their neighbor's houses, defacing property with graffiti, or driving through gay neighborhoods shouting anti-gay epithets out of car windows.

This said, I do not fully buy into Black's suggestion that a central therapeutic task is to help families "recognize that it's not your fault" (p. 152)[3] if a loved one is psychopathic. I strongly believe that parents, other family, and friends can and frequently do enable psychopathy, which they often do as a way of solving their own problems or as an indirect way of getting exactly what they long for. Some parents have done their enabling by encouraging the child to act out for them either subtly or openly. In the realm of subtle encouragement, one mother did this by wishing for a bouquet of flowers within earshot of the child each time the family passed a neighbor's garden. In the realm of overt encouragement, a mother took her child out of school in order to begin home schooling. Her real motive was not to provide the child with a better education but to avoid having her unruly child properly disciplined by the authorities. I have had more than a few cases of enabling spouses, such as a spouse who is a crook at heart enjoys and profits from having a thief in the family.

Enabling families need to start setting firm rules and enforcing them strictly. They need to stop rewarding psychopathic behavior and to instead start responding in a therapeutic way by setting limits on those family members who lie, cheat, steal, and otherwise behave psychopathically. In particular they need to stop undermining the therapist in order to defeat therapy. A therapist was doing well with a psychopath patient—until the patient's parents saw the therapist with his lover at the opera and informed the patient that the therapist was most likely gay. They did this deliberately to disrupt therapy so that

the patient could resume his pathological ways, ways that served his parents' dynamic needs and practical purposes.

SOCIAL REMEDIES

Those who propose social remedies for psychopathy fall into two camps: those who blame an increasingly liberal society for the present-day rise in the incidence and severity of psychopathy, and those who suggest that the real problem lies with the ultraconservative point of view, because that predictably leads to the reactive rebelliousness and defiance characteristic of the psychopathic way of life.

Benjamin B. Wolman, a psychologist whose view of the causes of and cures for psychopathy reveals a conservative bent, suggests that psychopathy is caused at least in part by a permissive society. He specifically blames a "flimsy, inconsistent, overpermissive, and procrastinating judicial system" for creating "a social climate conducive to sociopathic, antisocial acts." Focusing on the problem of unlimited freedom, he insists, "Democracy does not mean unlimited freedom to organize self-righteous sociopathic gangs." He then suggests (in text he underlines for emphasis), that "democracy means the same freedom for all, [not as the] dictators and terrorists practice all freedom for some" (p. 158).[12]

H. J. Eysenck concludes that psychopathy is the product of faulty conscience development and that "conscience . . . is a conditioned response," suggesting that treatment that does not focus on conditioning is likely to be ineffective, so that "traditional psychodynamic and non-directive client-centered therapies are to be avoided within general samples of offenders." Eysenck also suggests getting serious about punishing crime. As he notes, while "caution should be given on the occasion of the first offense . . . serious punishment should follow the next offense" and should consist of "the restricted use . . . of prison [as] rehabilitation" (p. 46).[13]

Society needs to stop enabling psychopathy. The attitudes of our individualistic (as opposed to collectivistic) society are to an extent mirrored in the psychopath's concern for his or her own rights over the rights of others and of society as a whole. In our society we as individuals not only tolerate but also encourage individual psychopathy, and we do so for a number of reasons. One is our generally overly permissive attitude that unconsciously stays our hand when it comes to stopping others' psychopathic behavior, so that we find ourselves coming up with one reason after another to figuratively, and sometimes even literally, let psychopaths get away with murder. Another is our tendency to ourselves be frustrated psychopaths who want to act psychopathically but due to laudable self-restraint can do little more than provoke others to act out for us. Also, not surprisingly, those of us who secretly want to behave psychopathically ourselves hesitate to condemn psychopathic behavior in others. To illustrate, writing about street vendors selling fakes, Tracie Rozhon and Rachel Thorner, two *New York Times* reporters, asked

someone buying from the vendors if they are concerned about legal consequences of their behavior.[14] The revealing and all-too-typical dismissive response was: "'Whatever . . . I'm not the one who is going to get into trouble'" (p. C5).[14] Finally, too many of us have a competitive sadistic streak that prompts us to indulge our appetite for Schadenfreude, so that we stand by and watch with glee as psychopaths bring our rivals down and get sinful pleasure from being able to say to ourselves, "I am smart, not like those dummies."

However, there are flaws in the hypothesis that overpermissiveness is the root of all psychopathy. For one thing, the possibility exists that the punitive behavior of one breeds the sneaky, aggressive, rebellious, retaliative behavior of the other. Many of my patients became and remained psychopaths in part in order to get revenge on an establishment they felt had, and indeed sometimes actually had, wronged them. Certainly, sending adolescents to reform school for psychopathic criminality can backfire when, instead of reforming, the individual learns even more psychopathic ropes.

Another flaw in Eysenck's theory is one Eysenck himself suggested. Since these individuals show poor conditionability, they won't learn from any kind of experience, good or bad, which means they will learn little or nothing from being condemned, controlled, and punished. As one patient said about himself, "I am like a dog that pulls right through its choke collar to be able to continue as before, testing limits even though I know how unpleasant or dangerous the consequences of my actions are likely to be."

What can we all do? As therapists and related professionals we can take pains to avoid self-serving actions that set a bad example, such as giving corrupt testimony in court, cheating on Medicare, or touting idiosyncratic therapy based on ill-considered theories that cross over into the realm of quackery.

As laypeople, all of us can help our children, parents, neighbors, and coworkers, superiors and underlings on the job, become healthy, balanced people. We can set a good example for all concerned by being neither excessively punitive nor excessively overpermissive. We can become more empathic and altruistic as well as more generally affirming, the latter by seeing and acknowledging the other person's point of view, understanding his or her motivation, even or especially when his or her actions are not to our liking, and treating others not as objects to be pushed around and toyed with like chess pieces but as intelligent, sentient individuals with human desires and needs, to be understood, respected, loved, and, whenever reasonable and possible, gratified.

All concerned, whenever possible, can and should use personal and professional influence and political clout to inject rationality and fairness into a world where presently passion replaces perspective and dishonesty triumphs over accountability. For example, we should all speak out against social hypocrisy. In particular we should all work toward a society that does not send

mixed messages that are the product of, and in turn create, a severe crisis of morality. Those of us in authority must avoid on the one hand saying, "Do as I say" and on the other hand saying, "Do as you wish." It strikes me as maladaptive and counterproductive that we now condemn drunk driving and yet build bars on the highway, and on the one hand condemn computer hacking and on the other hand fail to pursue and punish hackers, or, pursuing and finding them, first let them off easy then reward them with a job working for us as consultants, side by side as allies in the fight against computer crime. To me it is just common sense that our society, which today condemns spyware for clogging computers and stealing personal information and tomorrow catches but fails to punish those who write the programs, needs to do one of two things, and to do neither of them halfway. It needs to either change its attitudes and ways, or it needs to just accept the fact that sooner or later psychopaths, both mild and severe, will be in the majority, and that psychopathy will come to constitute not an emotional disorder that needs to be vanquished but a standard of normalcy that needs to be accepted, and even respected. If we are not careful, I predict that we will find ourselves in the position of being unable to answer with certainty Dr. Raeleen Mautner's (personal communication, 2005) perceptive and troubling question: "Is psychopathy abnormal, or is it normal to be a psychopath?"

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Narcissism: Greek Tragedy, Psychological Syndrome, Cultural Norm

Jerrold Lee Shapiro and Susan Bernadett-Shapiro

Most people know the story of the youth Narcissus, who became so enamored with his own image in a reflecting pond that he ultimately eschewed all romantic relationships with others, pined away, and died. Lesser known is the precursor to that final episode: Narcissus's fear of finding an imperfection and his cruelty to maidens. The nymph Echo was one who felt his disdain. She became enamored with young Narcissus, "a youth, whose beauty surpassed all others,"[1] but when she agreed to meet with him, his rejection was most cruel. When she endeavored to "throw her arms around his neck, he started back, exclaiming, 'Hands off! I would rather die than you should have me!'"[2] Echo slunk away to live in the wilderness, suffering in grief until she died. As legend has it, only her voice remained, even to this day, to reply to anyone who calls over canyons to her. Narcissus's cruelty to Echo was hardly unique. When he shunned another maiden, she prayed to an avenging goddess that he should suffer the same fate of rejection as she. Her prayers were answered. One day, Narcissus, tired and thirsty, knelt down to drink from a fountain and glistening pool. Seeing his own image reflected in the water, he believed it was a beautiful water spirit. In that moment, he fell in love with his own image. Of course his attempts to kiss and embrace the beloved object were unsuccessful. Each time he tried to feel it,

> it fled at the touch, but returned again after a moment and renewed the fascination. He could not tear himself away; he lost all thought of food or rest, while he hovered over the brink of the fountain gazing upon his own image. He talked

with the supposed spirit: "Why, beautiful being, do you shun me? Surely my face is not one to repel you. The nymphs love me, and you yourself look not indifferent upon me. When I stretch forth my arms you do the same; and you smile upon me and answer my beckonings with the like."[3]

As he pined away, his tears fell into the water and disturbed the image. As he saw it depart, he exclaimed, "Stay, I entreat you! Let me at least gaze upon you, if I may not touch you."[4]

Thus exist two major components of a modern day affliction: (1) obsessive self-involvement, including fear of defects and feelings of grandiosity and entitlement and (2) a lack of empathy (leading to cruelty) toward others.

The term narcissism describes both a psychiatric relational disorder and perhaps an evolving cultural norm.

As early as the turn of the 20th century, Theodore B. Veblen warned of "conspicuous consumption"—the elevation of form over substance.[5] In 1979, Christopher Lasch depicted a serious decline of social justice and a corresponding increase in competitive individualism.[6] Historians such as Richard L. Rapson have also noted the evolving imbalance between collectivism and individualism in American culture.[7] As rampant individualism becomes dominant in a culture, image takes on a higher priority than internal substance and narcissism becomes normative. Several questions emerge from these observations.

- Where are the boundaries between creative self-involvement and pathological relating?
- Is narcissism becoming the norm in modern-day America?
- Is narcissism a cultural phenomenon or a psychiatric syndrome?

To answer these questions, we explore both the psychological disorder and the cultural enhancement of narcissistic behavior.

A WORKING UNDERSTANDING OF NARCISSISM

It is important to recognize the common misconception that narcissists are in love with themselves. Just as for the Narcissus of myth, the narcissist is not in love with himself.[8] *He is in love with his reflection.* This is an important difference and is an essential piece in understanding the narcissistic syndrome. Rather than being in love with himself, he often fears at a deeper level that he is quite unlikable. Because his yardstick for lovability is observed perfection, he lives in how others see him. He lacks an objective or realistic measure. Instead, he becomes lost in whether, and how much, his reflection (also known as his "public self" or "persona") is appreciated. In short, the narcissist doesn't know or strive to know who he truly is. He is obsessed with his appearance.

This is the essential flaw. Because he loves only image or reflection, the narcissist must constantly strive to project an idealized image of himself. He becomes obsessed with perfecting the facade. In doing so, he may well deplete his energy, making him emotionally vulnerable. So depleted by putting all this energy into his appearance, he is often deeply hurt by others who either criticize or ignore his highly crafted image.

To the narcissist, love is indistinguishable from admiration, fear, or even awe. When he feels feared or "respected" by others, he believes that he is loved. Sadly, because the image is what draws the respect, he must constantly live up to this projection. In this way, he becomes progressively divorced from his inner self and married to the illusion. Any "true self" that he may have becomes solely a slave to the image.

Is a True Narcissist "Selfish"?

Because his image is paramount, it is easy to consider him selfish and egotistical. Yet there is an inherent conflict in that supposition. The narcissist is driven to please others, if, for no other reason, to be seen as a truly wonderful person. In this way, paradoxically, he becomes unattuned to his personal needs, aside from his need for admiration. Instead of putting himself first, he ends up putting last his true self, which becomes increasingly submerged. Meanwhile, his craving for the love and admiration of others forces him to serve only his childlike illusions of omnipotence and omniscience. Thus, because his very existence is ruled by how others respond to his image, his personal needs for growth, self-development, and intimacy are submerged or lost.

With so much of his energy focused on image enhancement, he has little left to give to others, which, combined with his inability to love flawed human beings, ultimately dooms him to a life of emotional loneliness. Although he is lonely, he presents the aura of a fierce individualist, zealously protecting his turf from others' dependency. This perfectionistic illusion of emotional independence is a "defensive" stance, which allows emotional nourishment for neither self nor others.

Entitlement: The Appearance of Extreme Selfishness

The combination of an illusion of caring and an illusion of extreme selfishness comes from a unique aspect of this personality: the belief in entitlement. If the image is so positive, surely he deserves to be treated better than normal people. As we will see later in this chapter, when the narcissist is treated as if he were an equal to others, he takes that as a betrayal, often feels cheated, or feels as if he is the object of discrimination. As an entitled person, he believes

that he should get more than a fair share, and his anger at such a slight can be quite formidable.

Having a superior (entitled) air is tied closely to a sense of grandiosity. Of course, some narcissists are quite dynamic, extraverted, and successful. Yet it is quite rare that their actual level of success matches their inflated self-image.

Thus, the paradox. He believes he should have special status, based on the quality of his image, but at another level, the substance of his true self goes unnoticed.

Because he lives primarily through a projected idealized self-image, the narcissist must constantly receive praise from others. This is the "evidence" of his superiority, and in the need for ever-increasing praise, he often exploits others as little more than instruments for personal gratification. Because of the belief that he is not accountable to mere average people, he will easily justify the consequences his behavior has on others' lives.

It is important to note that he is not unaware of the impact on others. He doesn't care, because he doesn't value nonfunctional, caring relationships with others. His experience and understanding of relationships is limited to one-way or mutual adoration, which enhances his perceived standing in a group. This quality is often perceived as a lack of empathy: a telling symptom of narcissism.

The Perils of Narcissism

Any personality that is so dependent on reflected glory is constantly vulnerable. A simple negative perception or minor criticism can be grounds for devastating threat. When Robert, an engineer at a software company, received his annual evaluation from his boss, it contained all "1's" and a single "2." Robert could not accept or tolerate the second highest category for one item, without risking a complete crumbling of his perfectionistic facade. A classic narcissist, he considered the objectively reasonable evaluation as an attack, which he believed had to be met with a show of great force to "right this terrible wrong." Robert's boss and coworkers were quite surprised by his extraordinary reaction.

Narcissists like Robert have a dichotomous experience of the world. Because there is no possibility of accepting a less than perfect evaluation, his psyche cannot allow for any shades of gray. In this way, the narcissist lives his life on the emotional edge. The narcissist is responding to extreme danger—emotional life threats—and his reactions seem extraordinary to others who fail to see the threat. One cannot have even a minor disagreement without tapping into his "fight or flight" response.

This level of reactivity leads to an almost paranoid quality in the way the narcissist relates to others. He must constantly question their motives and look

for criticism or disapproval. His extreme responses to minor or even absent slights often come across as bullying and blaming.

He cannot accept blame personally. It would constitute an injury to his image. Once wounded, the narcissist will accept no apologies, unless they are accompanied with humiliation, full acceptance of all responsibility by the other person, and extraordinary recompense. Forgiveness is not part of the narcissistic life. Often relationships are permanently broken over a perceived slight.

Narcissistic wounds can particularly be delivered by others who have previously held high status (for their successes, position, or what they can offer). Once hurt by an individual who he had initially idealized, the narcissist's fury has barely any bounds. His devaluation of the person is often quite public and destructive. Falling from the narcissist's grace renders a person "unsupportive" and useless in providing resources. Because such a fall presents a glimpse of a frightening picture of the narcissist's personal vulnerability, it is greeted by him with abhorrence, denigration, and rage.

Because the flip from idealizing to denigrating is so dichotomous and because it takes so much to fill up the narcissistic need, long-term relationships are likely to fail, and new people need always to be brought in continuously to pick up the slack.

NARCISSISM AS A CLINICAL SYNDROME

It is not always easy to distinguish between narcissistic character traits, cultural-centric narcissism, and narcissistic personality disorder. Only the last is a clinical syndrome. Narcissistic Personality Disorder is defined in the *DSM–IV* (*Diagnostic and Statistical Manual* published by the American Psychiatric Association). The syndrome is diagnosed on Axis II and represents one of the disorders of personality. Primarily, these diagnoses are descriptive of relational rather than thought, mood, or anxiety disorders. Generally, they are considered to be based on developmental deficits in relationship development.

As can be seen in Table 2.1, the narcissist is characterized as a selfish, uncaring, ruthless, and exploitive person. This is in quite sharp contrast to his internal experience, which is more one of anxiety, a deep lack of confidence, and often dissatisfaction. In short, the internal and external experiences of a narcissist are quite discrepant. Feelings of superiority and entitlement are matched unconsciously by insecurity and the need to constantly prove himself. His successful demeanor is often a single step away from instability. Propriety and the need for acceptance can give way to tantrums and bullying. How could he get this way? What could produce a Narcissistic Personality Disorder?

Table 2.1
DSM–IV **Diagnostic Criteria for Narcissistic Personality Disorder**

According to the DSM–IV, Narcissistic Personality Disorder is characterized
  as follows:
A pervasive pattern of grandiosity (in fantasy or behavior), need for admiration, and lack of
  empathy, beginning by early adulthood and present in a variety of contexts, as indicated by
  five (or more) of the following:

   1. has a grandiose sense of self-importance (e.g., exaggerates achievements and talents,
      expects to be recognized as superior without commensurate achievements)
   2. is preoccupied with fantasies of unlimited success, power, brilliance, beauty, or ideal
      love
   3. believes that he or she is "special" and unique and can only be understood by, or
      should associate with, other special or high-status people (or institutions)
   4. requires excessive admiration
   5. has a sense of entitlement, i.e., unreasonable expectations of especially favorable
      treatment or automatic compliance with his or her expectations
   6. is interpersonally exploitative, i.e., takes advantage of others to achieve his or her
      own ends
   7. lacks empathy: is unwilling to recognize or identify with the feelings and needs of
      others
   8. is often envious of others or believes that others are envious of him or her
   9. shows arrogant, haughty behaviors or attitudes

Source: American Psychiatric Association, Desk Reference to the Diagnostic Criteria from *DSM–IV*
(Washington, DC: American Psychiatric Association, 1994), 282.

THE ETIOLOGY OF NARCISSISM

It is important to note that all theorists who address this syndrome agree
that narcissism is a healthy and appropriate stage of childhood development.
Sigmund Freud originally viewed it as the normal developmental stage between
the autoeroticism of the infant and capacity for the developing child to love
others.[9]

Heinz Kohut's theory of the self perhaps best illuminates both normal and
clinical narcissism.[10] *The self*, defined as the "center of the of the individual's
psychological universe,"[11] forms through relationships with primary caregiv-
ers. The child's sense of self evolves as a result of the interaction between
the child's innate potentials and the empathic responses of adult caregivers.
To develop effectively, a child's budding self has two distinct needs: mirroring
and availability of an ideal adult image with whom the child can identify and
internalize.

   Mirroring. When a caregiver attends to a child, listens to him, reflects his accom-
      plishments, extols his positive qualities, and generally spends quality time with

the child, it is referred to as *mirroring*. It involves noticing the small things a child does well, such as smiling, walking, coming when called, or treating a pet kindly. When this happens, the child feels appreciated and experiences himself as a valued person who can then begin to appreciate himself.

Another aspect of mirroring involves the child reflecting his mistakes in a manner that promotes healthy self-knowledge and self-esteem. For parents, this means acknowledging the error without disparaging the person. Such non-traumatic failures foster development of the child's self. He grows emotionally as he internalizes these parental functions, and he successfully meets new challenges through reliance on his budding internal self (ego structure). Once this base is in place, the self grows further in the absence of direct parental responses, when the challenge is within the child's developing capacity.

In healthy development, the child's normal initial sense of grandiosity ("when I cry, milk is produced") is gradually modified and transformed into energy, ambition, and self-esteem.

Furthermore, as the child experiences the parents as reliable empathic figures, he is able to internalize a reliable ideal self with which to guide behavior and empathize with others.

> **Internalization.** In addition to the parental reflection of the child's appropriate grandiose-exhibitionistic self, there is an equivalent need for the parents to be mature persons for the child to emulate. As the parents exhibit ethical behavior, justice, and compassion, the child begins to find and develop those qualities in his self. In short, the caregivers provide an ideal adult image with whom the child can identify and subsequently internalize as his own idealized self.

Narcissistic Disorders

Narcissistic disorders are believed to arise when there is a consistent failure of either of these parental characteristics that normally promote psychological growth.

Thus they can arise when the child does not receive appropriate mirroring during early childhood. When the child experiences repeated failure to applaud and admire his emerging accomplishments, his grandiose self goes underground and becomes unavailable for continued development and modification. The child experiences a split in which his grandiosity remains unintegrated into his personality. This produces a paradoxical combination of bravado and low

self-esteem. The mirror hungry child is compelled to attract the attention of others to bolster his low self-esteem, often through a spiraling series of empty accomplishments.[12]

Similarly, the child who lacks a parent who can provide a proper ideal image for identification will engage on a search to find such an idealized "other" with whom he may identify for the purpose of building internal psychic structure, specifically the ideal self. This seeking can take the form of joining pro-social groups or joining gangs and cults. In a milder form it can be the naive trust in powerful charismatic leaders and the need for our celebrities and politicians to be perceived as royalty.

Narcissistic pathology results from the repeated empathic failure of the caregivers. Usually, these failures are the result of the parents' own pathology and inadequately developed self. Such parents may be preoccupied with their own needs for grandiosity and may even expect that the child would provide the parents with satisfactory mirroring. These parents may also need the child to be ideal as a way of fulfilling their own needs for ego strength. In this way, the children are seen as mere extensions of their parent's selves rather than as separate beings with their own needs.

Many authors have argued that the extreme neglect that comes from a failure of mirroring and ideal parent internalization could constitute a form of emotional abuse: a precondition for most personality disorders. It seems clear that the dehumanization that results from sexual, physical, or psychological abuse represents extreme forms of repeated empathic failure.

A child who is frustrated and/or abused learns quickly that the only "object" he can trust, the only one who is reliably available, and the one person he can love without risk of abandonment is himself.

Once a child eschews the untrustworthy others, his development of a model/ideal self is severely limited. Instead, he adopts the more primitive grandiosity and begins to feel omnipotent and omniscient. Unchecked by reality, he believes himself superior, worthy of adoration, and entitled to special treatment as an adult. The relational traits of a mature person, such as empathy, compassion, working hard toward a goal, fair comparisons with others' skills and boundaries, and especially the ability to postpone gratification are simply not learned. Often he feels as if he has a birthright and is preordained to be part of the ruling class.

Of course, faced with the vagaries of the real world, this feeling and presentation is quite vulnerable. Indeed, his emotional susceptibility to criticism is brittle. Having failed to develop a realistic self from interactions with caregivers and later, other adult figures, he is "struck to the core" with even slight disagreement. This is so because at a deep level, he fears that he has been exposed as

a phony. All narcissists are besieged by unconscious feelings of inadequacy and low self-worth (fluctuating with exaggerated, yet fragile, overvaluation of self-worth) that result directly from the (often unconscious) fears of another emotional abandonment. In short, having suffered from repeated empathic failure by his caregivers, he replicates this lack of empathy to others as an adult.

Craig is a good example of this phenomenon. At 38, he had a long history of relationships with women but no long-term commitments. His primary means of interaction involved looking for praise for his myriad successes as a real estate salesman and a consistent debasing of his current lady friend. He would frequently treat his partner, Denise, as stupid and beneath him. On his 37th birthday, he criticized the special meal she cooked for him, the wine she chose, her manner of dress, her weight, the way she talked to his friends that she invited, and finally, aspects of her love making. Months later, after several repetitions of humiliation, she left him. He reacted with fury at being rejected and was deeply hurt. Emotionally, he experienced a replication of his childhood trauma, when his mother left him with his stepfather and did not return for over a year. His fury was magnified a year later when he heard that Denise had married another man, Carl. On the surface he saw her new husband, who was far less successful financially than he, as unworthy of a woman who had been with him at one time. He could not comprehend that Carl offered Denise empathy and compassion—something he could not.

Craig's failing with Denise did not lead him to self-reflection or a revised sense about how to treat others, especially significant others. Indeed, his theories of what occurred were primarily confirmations of his initial conclusion that she was inferior to him. Of course, his pain about this loss lingered for years, doubtlessly compounded by several subsequent similar experiences.

The disorder from which he suffered was developmental and historical. To repair it in the present, he would have to experience a relationship in which he received the mirroring he missed as a child. He would need an emotionally corrective relationship to supersede the failure of the original parental one. Craig was fortunate. He was able, over time, to develop such a relationship with a therapist, and by the time he was in his mid forties, he was able to transform the mirroring and internalization of that relationship into a more complete sense of himself and subsequently a successful relationship with a woman, to whom he is now married

What constitutes good enough parenting to avoid the development of a narcissistic personality disorder? Parents need to be mature enough to focus on their children's needs for appropriate limits. They need to be present and engaged with enough integrity to be experienced as an ideal other. Parents cannot be perfect. In fact, being, or striving to be, perfect could hinder their

children's development. Parents who demonstrate through words and deeds that they are worthy of respect and esteem will provide a "good enough" figure for identification.

WHY DO WE SEE AN INCREASE IN NARCISSISTIC PATHOLOGY?

Parents who lack an empathic capacity or consistency have been with us for a very long time. Yet it seems that narcissistic personality disorders are increasing in the modern world. There are many potential reasons, both psychological/familial and sociocultural:

1. We may see an increase in narcissistic personalities due to *advances in assessment and diagnosis*. We may better understand the normal development of the psyche and the specific failures in the normal developmental processes that can result in the manifestation of clinical narcissism.

2. Our *culture and family structure have also evolved* in directions that might result in a greater incidence of empathic failure in child rearing and consequent narcissistic pathology. The diminution of physical proximity to extended family and close-knit communities can result in added pressure on parents and children to negotiate interactions without traditional supports. This, combined with busy or absent parents, may contribute to a lack of appropriate mirroring and available adult figures for idealization and identification.

3. *Divorce and other trauma* may expose children to an early rupture in their need to idealize parents. Exposure to breech of commitment, betrayal, infidelity, parental abuse of drugs and alcohol, and parental decompensation during a divorce can be traumatic for the child's budding self-development and identification with parents. Divorce ushers in an abrupt loss in idealization that disrupts the children's trust, both in their parents and in their selves. It can inhibit or reverse a more gradual awareness of parents' imperfections, during which the child can retain his own idealized self and idealized other even as these are modified appropriately over time into "good enough" self and other. Whatever the traumatic event, it is the comfort and caring that the parent provides during the event that is important. A divorce handled well can be less traumatic than simply parents' busy schedules, where the parents miss the empathic connection, understanding and attunement necessary for the child's developing psyche. Repeated empathic failure, not imperfection, is the problem.

4. *Fear* may be another factor that contributes to parental empathic failure. We have more fear these days about preparing our children for the future. We know they will compete in a global society for limited resources. We have increased fears for their safety as we are exposed to media coverage

of every disaster imaginable. Because of these fears, parents may be more demanding of their children academically, expect more independence at an earlier age, and yet try to shelter them from perceived dangers. In this regard, they may miss their child's developmental needs in favor of their own needs for him to do well in life and be prepared for what appears to be an increasingly uncertain future. We may miss our children's need for listening, understanding, and empathic responding in our own hurry to get things done and provide a better life for them.

Narcissism is a normal stage in child development and does not entirely vanish in adulthood. In a healthy individual, infantile narcissism is gradually transformed to energy, ambition, self-care, self-growth, and the extension of self to family and community. Pathological narcissism is the result of repeated empathic failure during childhood and the lack of adult figures for idealization, identification, and internalization. Specific factors contributing to empathic failure may include the isolation of the nuclear family, single-parent families, lack of social supports such as high quality affordable child care, preschools, and elementary schools, and cultural values such as individualism and materialism.

THE CULTURE OF NARCISSISM

Consider the characteristics of the narcissist. He exudes a sense of belief in his own specialness and associates primarily with others of special or high status. He requires a certain level of admiration. He is comfortable with interpersonal exploitation, discarding former supporters and spouses as they ascend or maintain status. He is envious of those above him in wealth, public recognition, or influence and expects and suspects that others envy his fame.

Such qualities are common to many of the notable successes in American culture. Our stars and modern heroes are remarkable for their larger-than-life images and public presentations. Can we not view many of our sports heroes, movie stars, supermodels, and titans of industry as grandiose, arrogant, and in consistent need of unlimited admiration?

Cultural Royalty

The expectation of special treatment for stars is quite strong. In 2005, film superstar Tom Cruise, on a promotional tour to promote both his new film and his new engagement, expressed outrage that interviewers did not accept *unquestioningly* his views on Scientology. The question is not about Mr. Cruise's craft, nor his box office appeal. It is about the hubris of expecting that his skill as an actor will make him a valid religious spokesman.

Professional athletes, the gladiators of our times, are paid and encouraged to be uniquely narcissistic. Football star Terrell Owens has insisted for the second time in two years that his legal contract be revised upward. Last year, he refused to report to one team to which he was traded, forcing a more favorable trade. In Mr. Owens's mind, he is larger than his team, larger than his sport. Mr. Owens is not alone.

When future hall of fame baseball pitcher Pedro Martinez left the Boston Red Sox for the New York Mets, his stated reason for making the move was "respect." To him and his stardom, the Red Sox were willing to reward him insufficiently for the level of his personal image.

Professional basketball player Latrell Sprewell, who unfortunately is best known for choking his former coach in a practice, expressed his deep hurt and sense of being "disrespected" (a key term for narcissistic injury) when he was offered *only* $14 million in his most recent annual contract. When the media jumped on his "arrogance," he reportedly replied, with supreme self-justification, that he had a family to feed.

He Who Dies with the Most Toys Wins

Of course, Mr. Sprewell's salary is minimal compared to compensation for CEOs in some large corporations. Their remarkable salaries compared to those of their workers can only be explained by greed or narcissism.

According to *Forbes* magazine's (2004) annual review of top packages for CEOs, Terry S. Semel of Yahoo! "earned" $230.6 million; Barry Diller of IAC/InterActiveCorp, $156.2 million; and William W. McGuire of UnitedHealth Group, $124.8 million.[13] Mr. McGuire's success was generated in large part by reducing health benefits to subscribers and compensation to health care providers.

Other notables include Oracle's Larry Ellison and his three-quarters of a *billion* dollars in 2001; Apple's Steve Jobs's nearly $400 million in 2000; Michael Eisner's roughly $1 billion since becoming CEO of Disney; and former Tyco CEO Dennis Kozlowski's $100-million-a-year pay package. Apparently Mr. Kozlowski deemed this compensation insufficient. When he was indicted for stealing $600 million in company funds and for evading sales taxes, he resigned with generous severance. Of course, the gold standard of severance/retirement packages went to former GE CEO, Jack Welch. As came to light in his highly public divorce, he received, in addition to a substantive pension, lifetime tickets to New York's Yankee Stadium and Boston's Fenway Park, a Manhattan penthouse, a plane at his disposal, a chauffer and cars, and numerous other perks.

It could be greed alone that allows these individuals to take compensation that goes so far beyond "feeding their family," but from a psychological

perspective, it is something else as well. Such remuneration enhances the comparative image of the recipients. If they compete successfully with others, they somehow do not have to reflect on an inner sense of insecurity and fears of rejection. Of course, a couple of million dollars annually can purchase any number of sycophants in an entourage.

What is particularly interesting from a cultural standpoint is that the media and many in the culture see these salaries and egos as admirable, or at least justifiable. What else can explain that the oft-expressed belief that a CEO is *worth* the $100 million annual compensation packages. According to Harvard professor Rakesh Khurana, MBA students believe these salaries justifiable, doubtlessly in the hope that they too will catch lightning in a bottle.[14]

Success is not the criterion for such reward. Rather, it is the appearance. Indeed, failure is often rewarded with personal retirement packages that could clothe and feed all the residents of some nations. Two grand examples of the significance of form over substance appeared in a mid-July 2005 *Wall Street Journal* article.

On July 14, the *Journal* reported on the 25-year sentence for former WorldCom CEO Bernard Ebbers for his role in the $11 billion fraud during the late 1990s.[15] Mr. Ebbers was charged with ordering employees of the company to "hit the numbers"; to falsely report earnings to meet Wall Street analysts' expectations. On July 15, the paper had a feature article on image consultants, in which was stated, "In a world where people are finding no end to the pressure to be stylish, the booming market for upscale personal services has spawned a new even more rarified creature: the self described lifestyle designer."[16] Such lifestyle experts are dedicated to the image—often quite at odds with the person. In psychological terms, they are focused on the public rather than the real self.

CULTURAL NARCISSISM AND THE MEDIA

There is always a heavily debated question of the extent to which the media reflects a culture and the extent to which it creates one. As is the case with most long-standing heated debates, there is truth to both positions. In the case of narcissism as a cultural phenomenon, the media clearly plays a significant role.

One example of the media expectations of a cultural royalty that stands above all the rules was a recent incident in Paris. Oprah Winfrey, one of the most famous and successful women and one of the most recognizable personalities in the world, was denied entrance to Hermes, a luxury-goods store in Paris, when she arrived just after closing. Miss Winfrey reportedly expressed disappointment, because there were still shoppers visible within. For the media, however, it went far beyond disappointment; it was an international incident. News coverage around the world speculated on the possibility of

racism and ubiquitously pondered why a store would not reopen its doors for such a notable. The sense of the stories was clear: someone of Oprah's fame and fortune *should not* have to follow rules and *should* always receive special treatment.

Perhaps popular cultural values are espoused and manipulated by their prime purveyor, U.S. network television. Many of the most popular programs are of the reality genre. These are almost always characterized by contests in which there is one supreme winner and many losers. *The Apprentice* is but one example in which the key words are uttered by Donald Trump: "You're fired," he roars from his special boardroom as another contestant is confronted with the fact that he or she can no longer play in "The Donald's" field. Mr. Trump's image is exemplary of the culture of narcissism: he refers to himself in the third person as "The Donald" and is primarily well known as the developer whose name must appear on each edifice and on his array of highly publicized marriages, divorces, and prenuptial agreements. He is the sole purveyor of winning and losing.

Similarly, the show *Survivor* involve less popular individuals being "voted off the island"—a term for banishment—in primitive cultures, the worst of all rejections. *American Idol* is a talent show, similar to the old Ted Mack's *Original Amateur Hour*, but with a mean-spirited quirk. Poor performers (or those who show insufficient amounts of skin) are not just losers or runners-up. They are ridiculed by the host.

Whether the narcissism inherent in popular culture is potentially harmful or just distasteful is still in question. When narcissism enters the political realm, the harm is evident.

The Form of Politics

Cultural narcissism has reached well beyond staged reality programs. It has reached into the political realm as well. "Will it play in Peoria?" the mantra of the Nixon administration, has held sway long after Mr. Nixon was forced to leave office for substantive sins. The phrase was an index of how well a particular political maneuver appeared rather than whether it actually reflected deeper truth. Our politicians are "packaged" by Madison Avenue for television and radio sound bites and targeted to specific audiences with the same slick style that is used to sell soft drinks, beer, soap, deodorants, cars, or, increasingly, prescription medications. Teams of speechwriters, clothes designers, and image consultants present an illusion of the person that may or may not truly represent the candidate or office holder. Using charged language, image makers may even alter the nature of issues. Thus, in dealing with the most divisive issue of legalized abortion, what one political faction calls "right to choose," their opponents refer to as "right to life."

The current George W. Bush administration is especially adept at such image control. When he ran for president, his history with substance abuse was somehow declared "not for consideration." His desired reduction of the tax on large estates was refashioned as a "death tax," to garner support from millions who would never benefit personally from such a tax break. Indeed, the money ultimately will come out of their pockets and benefits.

At their extreme, the image makers have been able to create labels for their desired programs that are diametrically opposite their actual impact. A social program such as the No Child Left Behind Act, promoted to enhance education, is, upon closer scrutiny, a reduction in some teaching budgets. The Clean Water Act has provisions that allow for continuing pollution of our water sources. Indeed, we invaded Iraq to protect America from "Weapons of Mass Destruction" that indeed never existed. This seems like a painful déjà vu to President Lyndon Johnson's use of the Gulf of Tonkin incident in 1965. In that case, a purported attack on U.S. vessels was deliberately misconstrued yet served as the reason for increased U.S. military involvement in Vietnam. Just like the Bush administration's misrepresentations in Iraq and remarkable leeway given by Congress, Congress also gave Mr. Johnson unprecedented power in Vietnam. Johnson was authorized to "take all necessary measures to repel armed attack against the forces of the United States and to prevent further aggression."[17]

How is all this related to narcissism? How has our culture gone from a substantive to an image orientation, the way that Narcissus lost sight of anything but his reflection? The answers are both sociocultural and psychological.

ENTITLEMENT OR ENTROPY?

It has been noted by many social commentators that over the past century in the Western world there has been a drift toward disintegration of human relationships and institutions. The individual is honored above the group. Despite much greater access to information, there appears to be a concurrent deterioration in quality parenting and child rearing within our society.

Much of this shift dates to the beginning of the Industrial Revolution. Men were forced from their small family farms and businesses to work in larger centers for increasingly larger corporations. Communities became less efficient in supporting their members. Rather than an equity-based, caring, compassionate ethic that fosters emotional development, we find increasing competitiveness. The "me" generation of the 1970s was never supplanted by the anticipated "we" years. Even the current revival of religious and political interest in the country appears less ecumenical and more segmented, primitive, exclusionary, and

fundamental in nature. A mode of business increasingly present since the late 1970s is defined by "eat what you kill" or "I got mine, you get your own!"

When a culture begins to value greed and form over substance, historians are drawn to the insights of Edward Gibbon in his 18th-century classic *The Decline and Fall of the Roman Empire*.[18] A narcissistically oriented culture is vulnerable. It takes but a single misstep to bring it crashing down. When we look behind the curtain at the great Wizard of Oz, we see an old man with smoke and mirrors, trying to protect his image rather than his constituents or his self.

Many observers believe that Western culture is heading into this special form of oblivion. One characteristic of decline that parallels Gibbon's perception is described by Aaron Stern as a strident demand for increasing rewards and a concomitant "unwillingness to accept responsibility for government, family and other social institutions."[19]

In 1899, Thorsten Veblen commented on the loss of social connection in his *Theory of the Leisure Class*.[20] In this influential tract, he postulated that "conspicuous consumption" served only form. It benefited neither society nor the individuals who experienced it. It was simply a new competition, in which the greatest show of economic largesse was the victor. It was show, not substance.

Christopher Lasch describes the alarming growth of ego in our culture, contrasting that growth with the necessary loss of ego inherent in true maturating.[21] He attributes this in part to the corruption of the American Protestant ethic. The Horatio Alger self-made man was in Lasch's terms the "archetypical embodiment of the American dream, [who] owed his advancement to habits of industry, sobriety, moderation, self-discipline, and avoidance of debt." Focused on delay of gratification for greater goals in the future, he made investments in business, family, and community that could grow slowly over time. His gratification came from his good works. For Sigmund Freud, *Arbeit* (work) was a cornerstone of personal human growth.[22] For Lasch, "the self-made man took pride in his judgment of character and probity; today . . . practices the classic arts of seduction, with the same indifference to moral niceties, hoping to win your heart, while picking your pocket."[23]

Goodbye, Horatio Alger. Hello, P.T. Barnum!

Since the turn of the 20th century, social commentators have been decrying a definition of success based on salesmanship and personal magnetism rather than good works. This notion expanded in the 1940s and 1950s with Dale Carnegie's *How to Win Friends and Influence People*[24] and the popularity of radio preacher Norman Vincent Peale.[25] The appearance of success began to supplant hard work as the source of social acclaim.

Today, we are inundated with social imperatives to "dress for success" and to "look your best." Periodicals are filled with suggestions for better living by hiding physical faults. One has only to view the first 50 pages of a women's magazine such as *Seventeen* (which is read primarily by 13-year-olds) or *Cosmopolitan* to discover that a woman's hair, lips, weight, odor, teeth color, bust line, complexion, and so forth, are all defective but correctable with some over-the-counter product. Surely, happiness will follow.

On TV this is carried further to the extreme with "makeovers" or "extreme makeovers" or even "ambush makeovers." These shows take in the "ugly duckling" and transform (typically) her into a beautiful swan in appearance. As part of these image transformations, we have seen a frightening increase in plastic surgery in an industry that has shifted its focus from disfigurement to seemingly commonplace "beauty adjustments." Elective procedures were up 44 percent in the year 2004 alone.[26]

Of course, the underlying assumption is most narcissistic. It is not about the person per se; it is about how she appears to others. What about a person's psychological or spiritual makeover? That is not for the media. That is not about narcissism, because that involves self-reflection and admission that a person wishes to change to be a better person.[27]

Lasch continues,

> In a society in which the dream of success has been drained of any meaning beyond itself, men have nothing against which to measure their achievements except the achievements of others. Self-approval depends on public recognition and acclaim, and the quality of this approval has undergone important changes in its own right. The good opinion of friends and neighbors, which formerly informed a man that he had lived a useful life, rested on appreciation of his accomplishments. Today men . . . wish to be not so much esteemed as admired. . . . They want to be envied rather than respected. Pride and acquisitiveness, the sins of an ascendant capitalism, have given way to vanity.[28]

In a narcissistic world, there is great vulnerability. Fame is a fleeting phenomenon like the daily news. Today's heroes are tomorrow's answers to a trivia question. When our fame, or notoriety, is so dependant on glamour and publicity, the individual's self-esteem is at the mercy of fads and vagaries of public opinion. Lasch concludes, "When policy making, the search for power, and the pursuit of wealth have no other objects than to excite admiration or envy, men lose the sense of objectivity, always precarious under the best of circumstances. Impressions overshadow achievements."[29]

Being a celebrity has become an end unto itself. In the 1950s and 1960s, Zsa Zsa Gabor was a seemingly ubiquitous celebrity for the accomplishment of

nothing more than being a celebrity. Similarly, relatively meaningless acts such as Janet Jackson's exposed breast at the 2004 Super Bowl halftime show or the action of a streaker at any sports event create media feeding frenzy. As Daniel Boorstin opined in 1972, "People talk constantly, not of things themselves, but of their images."[30] These he refers to as "pseudo events," or, nonevents and images that receive a lot of attention.

For the narcissist, or indeed for the narcissistic culture, there are only two categories: (1) the rich, great, important, and famous and (2) the hoi polloi, or masses. Otto Kernberg, a prolific authority on narcissism, notes that the narcissistic individual is so fearful of belonging to the mediocre that he worships heroes and yet viciously turns against them when they dissapoint.[31]

One example of this duality can be found in the profoundly disturbed individuals who murder for fame's sake. Thus the assassin attaches himself to his victim with a deadly intimacy. Thus it was for John Hinckley, who shot President Reagan in a belief that this would impress Jodie Foster, an actress he admired after watching her role in the film *Taxi Driver.* Curiously, Mark David Chapman, who shot John Lennon a year earlier in 1980, also mentioned Ms. Foster as the object of his fantasies.

For Christopher Lasch, these individuals go far beyond egoism. Indeed, for them, the self loses its boundaries and merges with its surroundings. This is the embodiment of pathological narcissism.

COLLECTIVISM AND INDIVIDUALISM

The cult of personality or charisma, as many have described such phenomena, is quite a dramatic shift from the "organization man" so eloquently described by William Whyte in 1956.[32] Modern successful executives are a far cry from Whyte's self-sacrificing "company man." Corporate advancement today is accomplished through the ability to use others, to change companies regularly for incremental advancements up the corporate ladder, and, more than anything, by convincing others that you are a winner. For Kernberg, such persons are forever searching for external omnipotence from which they can finally derive strength.[33] Historian Richard Rapson attributes many of these changes to broader cultural patterns.[34] He describes a major revolution in Western culture from collectivism to extreme individualism over the past three centuries.

The American Founding Fathers made a strong point that each individual had a natural right to the *pursuit* of happiness: a great change from the class-bound European models of the day. For narcissists, this is interpreted as an individual *entitlement* to happiness and a scramble for wealth and notoriety, with an attendant lack of empathy for others.

Not all Western countries follow the American extreme. Many European countries honor individualism but pay greater attention to social rights. Typically, this means that they tax themselves at twice the U.S. rate to support social programs. Asian cultures typically are far more collectivistic. Individual needs are subordinated to the needs of family, village, or other identification group. These cultures emphasize conformity, harmonious interdependence, and attending to and fitting in with others.

Hazel Markus and Shinobu Kitayama argue that in most Western independent cultures, there is a belief in the inherent separateness of people.[35] These cultures value individuality, uniqueness, and independence. Most non-Western interdependent cultures, on the other hand, insist on the fundamental connectedness of human beings. The self is defined in relation to ancestors, family, friends, and workmates. In the West, there is a greater focus on independence than interdependence.

Harry Triandis and his colleagues note that individualists are good at meeting strangers, forming new groups, and getting along with a wide range of people.[36] They are less good at managing long-term relationships. Collectivists, on the other hand, make a sharp distinction between in-group and out-group members. With family and friends, they are warm and cooperative. With out-group members, they are formal and non-cooperative.

Although cultural patterns provide generic stereotypes, most people in developed cultures are almost always faced with a balancing act between the needs of the one and the needs of the many. The narcissist cannot balance these needs, because in part, he is unaware of them. Thus he is plagued with both demands—Western needs to look superior and Eastern focus on others' impressions. For Rapson, American individualism has edged into selfish narcissism; he believes that, for all of us, a balance with the collective concerns would make life infinitely richer.

CAN NARCISSISM BE ACQUIRED?

The question remains as to whether narcissism can be culturally conveyed or whether it is inevitably the result of what Heinz Kohut called "repeated empathic failure" or an emotional developmental disability. Psychiatrist Robert B. Millman defined the concept of *acquired situational narcissism*, a temporary psychological dysfunction that often accompanies fame. Dr. Millman believes that his celebrity patients may act awful because of the situations in which they find themselves. He argues that they acquire their narcissism by being fed their image by the entourage and media around them. In an interview with *New York Times* reporter Stephen Sherrill, Millman notes, "They're not normal. And why would they feel normal when every person in the world who

deals with them treats them as if they're not? We're all complicit in acquired situational narcissism. . . . We've created it. They're just responding to us."[37] Millman also notes, as for all narcissists, "Their marriages fall apart, they make lousy parents, they take copious quantities of drugs, they get into trouble with the law. Because they truly don't believe the world is real, they begin to think they're invulnerable. Some even risk their lives, since the world can't hurt them if it's not real."[38]

Sam Vaknin, a prolific writer on this subject, disagrees. He argues that because every human being—regardless of the nature of his society and culture—develops healthy narcissism early in life, it becomes pathological only by abuse. For Vaknin, acquired situational narcissism is merely an amplification of earlier narcissistic conduct, traits, style, and tendencies.[39] Not only are narcissists drawn to celebrity, but once powerful, rich, or famous, they gain immunity from social sanctions for expressing the underlying disorder.

Whether or not cultures can create narcissism is an interesting question. What is not in doubt is how cultures support narcissism.

THE DOWNSIDE

In many ways, narcissism is sexy. Flash is appealing. The very possibility that anyone may become a star and receive the spotlight treatment is enticing. Being noticed for looking good and gaining high praise seems to many the antidote to their childhood rejections and painful social exile during junior high school years. Asked about their dreams, many Americans will answer "fame and fortune," in that order. So what's wrong with this picture?

1. It is only a picture; a Dorian Gray kind of reality.
2. The cultural toll is quite heavy. In a world with few big winners, the many losers have to support the excesses of these larger-than-life characters. Not only are there clear distinctions between the haves and have-nots, the enticing illusion for all those at the bottom is to somehow rise to this elite class. Of course, this pressure encourages those in the winner's circle to continually resist others from joining their ranks. In short, a narcissistic culture is rife with class warfare. Indeed, a Gallup Poll taken right after the now-famous tax cuts of the first George W. Bush administration showed wide support for the cuts in estate taxes by people unlikely to ever benefit from such reductions. The poll results were stark: over 20 percent of the voters believed that they were in the top 1 percentile in income; another 20 percent believed that they would be in the top 1 percent. That, more than anything, represents a narcissistic illusion.
3. Those who are so focused on preserving their image have little left with which to do the work of the society that they presumably are leading.

4. Individualism carried to the extreme produces losers rather than winners. The U.S. men's and women's teams at the 2004 Olympic Games are exemplary of narcissism's downside. Although the players on the men's basketball team were individually the most talented on a man-by-man basis, they lacked the teamwork necessary to win more than a bronze medal. By contrast, the women's soccer, basketball, and softball Olympic teams were paragons of teamwork and collective work. They all decisively won gold medals. Similarly, the Los Angeles Lakers professional basketball team featured four future Hall of Fame players on their roster. Yet they lost decisively in the NBA Finals to the Detroit Pistons, a team with no star power but much team play.

Bill Bellichek's New England Patriots startled the football world by winning three Super Bowls in four years. They so eschewed individual notoriety that they insisted on being introduced not as starters or stars but as a whole team. Red Auerbach, one of the most successful basketball coaches in NBA history, was fond of observing that regardless of each person's shooting ability, there is only one ball. His success was predicated on individuals playing roles and subverting their egos for the good of the team.

An interesting picture of individualism running amok is portrayed by James Poniewozik.[40] He describes a ride in the family car (SUV) in which each member of the family is plugged into different entertainment during the drive. With the freedom afforded by TiVo, we have ceased to experience cultural events simultaneously. No longer is a phenomenon like the TV miniseries *Roots* able to catch the hearts and minds of the populace as a whole and provide so much to share. Instead, now we each watch a program at our own private time. Just as for the SUV ride, family and community take a back seat to the media input. As Poniewozik states, "Through niche media, niche foods and niche hobbies, we fashion niche lives. We are the America of the iPod ads—stark, black silhouettes tethered by our brilliant white earbuds, rocking out passionately and alone. You make your choices, and I make mine. Yours, of course, are wrong. But what do I care?"[41]

It's not surprising that we would apply the same principle to politics. Do I tune into a "red" or "blue" state perspective on TV or the Internet? We no longer get The News; we choose the news and the slant we desire. There is a great danger here. Narcissism in politics leads to major failures. To maintain its image of righteousness, a narcissistically based political administration has to block dissenting views, require fierce loyalty, prefer propaganda to objectivity, and sell the notion of their religious or moral superiority.

False representation is no problem for narcissists. It is the image speaking. For example, the totalitarian regimes of USSR politics, ushered in by Joseph Stalin, were reported by a large propaganda machine, always represented by the

Soviet controlled newspaper *Pravda* (which is the Russian word for "truth"). Thus it is that programs such as No Child Left Behind, supposedly geared to better educational opportunities, expend funding on testing rather than on educating, or that "saving the rainforest" means burning it down.

The world is getting better and worse for narcissists. Rampant individualism comes with increasing independence and freedom. The commensurate decline in social civility and institutions is beneficial to the image side of the narcissist, who can be less deterred by social bonds. Yet even as his fame increases and the star image is enhanced, there is an increase in isolation and attendant opportunity for abandonment and rejection. Without the more collective social props, no clear reparative social fabric, and more likely replications of early losses, there is simply less chance to correct the rejections of the past.

IS THERE A CURE FOR NARCISSISM?

Although theorists differ on the approaches to treating narcissism, there are several points in common. Almost all therapists who treat individuals diagnosed with personality disorders (Axis II in the *DSM–IV*) agree that the relational deficits have some genesis in childhood. Most, like Kohut, believe that narcissism, in particular, is caused by repeated empathic failure and a splitting off of a "false self" from the real self.[42]

Thus, treatment for narcissists involves the rediscovery and support of the real self. This is no easy task. When his softer, more vulnerable self (versus his image) is exposed, the narcissist is likely to flee from therapy, often with great derision for the therapist. The therapist must first find a way of creating a supportive environment in therapy, within which the narcissist can feel safe enough to explore slowly his vulnerable sides.

Complicated Therapy

A number of factors make treatment of narcissists quite difficult.

- Treatment is necessarily long-term (over a year).
- Treatment entails an open-ended verbal contract that the therapist will be available for the duration of treatment. This consistent availability helps relax somewhat the narcissist's fears of abandonment if they feel vulnerable.
- Narcissism is a disorder of personality. Unlike many behavioral or anxiety disorders, it is always present.
- Many characteristics that make relationships most difficult (lack of empathy, grandiosity, entitlement, and extreme vulnerability to slight with resultant rage) also inhibit the therapeutic relationship.

⚬ Narcissism is also commonly compounded with allied disorders, such as paranoia, obsessive-compulsive disorder, and impulsivity.

The Style of Treatment

Most therapists who directly treat personality disorders are psychodynamic in orientation. Essentially, the goal is to create an opportunity for the true self to resume the growth that was inhibited in childhood. The therapist tries to do this by offering a holding environment: fertile ground rich in safety, predictability, justice, nurturance, and re-parenting, such as mirroring and an ideal self with which to identify. In this emotionally corrective environment, the narcissist may learn that his past experiences with rejection are not immutable; that some relationships may in fact be nurturing and supportive.

Therapy typically begins with listening and accurate empathy. It is normal during the early sessions for the therapist's comments to be ignored or noted only as supportive. Gradually, the therapy proceeds with a combination of eliciting the narcissistic (false self) defenses and then supporting them to help the narcissist use the strength of his psyche to attend to the weaknesses. Thus the therapist will not challenge directly the omnipotence. Conversely, she will appeal to that very grandiosity to work assiduously on ridding the narcissist of self-defeating and counterproductive thoughts and behaviors. In short, this may reinforce the narcissist's feeling of power while underscoring the need for change.

It's a tenuous balance. Any challenge to a narcissist may be perceived as wounding and may result in an extraordinarily angry response. Direct confrontations could lead to a power struggle with no possible victor. If the narcissist wins, he devalues the therapist; if he loses, he feels humiliated, persecuted, and exposed—these situations do not create a ripe environment for effective therapy.

Consider this report from a narcissistic patient who was in the process of switching "to a competent therapist." The following phone conversation was precipitated when the therapist announced that she would be taking a three-week vacation a month hence.

I mean, who the hell does she think she is? What kind of professional credentials does she have . . . Ph.D. from the University of Kansas? Kansas, for Christ's sake . . . and that office, could it have been furnished worse? It was beyond even those guys from "Queer Eye"! Plus, you can't imagine the shoes she wore with that dress. How in hell could she help me? I am a success; not someone hidden away in a small office, with no support staff. I should ask for my money back for all those wasted sessions, maybe I should sue her for malpractice, just for the waste of my valuable time.

To the client, the therapist's vacation plans underscored that he was not the only important person in that relationship. This realization served to reactivate the pains of abandonment he suffered as a child; hence the childlike level of rage at this wound. The upcoming separation was simply too much like a deep personal rejection. In a shockingly swift turnaround, the therapist went from a position of overvaluation (my therapist, who is, by definition, the best) to devaluation (another inferior mortal, who, of course, let me down).

A great deal of the therapy involves uncovering the past—especially painful childhood memories. The patient gets to relive psychologically the slights, conflicts, and trauma in an environment of acceptance. It is assumed that in order to survive the failure of the original caregivers to mirror and provide a model for identification, the child represses his needs and develops this protective grandiose image or false self rather than his true self. Once the unconscious (repressed) issues begin to emerge in a safe environment, the therapist interprets them gently for the client. Through the lengthy process of uncovering, support, and interpretation, the client begins to gradually learn to live more in his real self and drops the accoutrements of the "image."

The relationship with the therapist (often referred to as the transference relationship) then becomes the testing ground for the client's healthier and more real future relationships.

Although other forms of therapy have been used in treatment, the brief outline above coordinates most closely to psychodynamically oriented therapies, the source of the bulk of the work over the years.

Hard Therapy

Some question whether Narcissistic Personality Disorder is curable at all. Most authors caution that, at best, it is very difficult. Sam Vaknin comments on the importance of early detection and treatment.[43] Most psychiatric textbooks warn therapists to be modest in their expectations and alert to potential harm to their own mental health.

Focusing on these difficulties for therapists, Howard Goldman warns that people with personality disorders "cause resentment and possibly even alienation and burnout in the healthcare professionals who treat them."[44]

There are also some indications in the literature that a therapist is sometime fooled into believing that his or her narcissistic patients are cured. Narcissists are consummate actors who can in role deceive both therapists and themselves. In addition, because these patients are often so difficult as clients and sometimes abusive to therapists, there is a definite impulse for therapists to overestimate the therapeutic gains.

A particular challenge for therapists is the undeniable fact that a narcissist's life in the fast lane is more exciting than a "normal" life. As one patient observed, "For me, getting better is like being neutered." Such individuals usually do not seek therapy for anything less than a major life crisis.

The Other Side of the Coin

Narcissism is among the mental disorders that sometimes moderate with age. Occasionally, around the midlife years, the antisocial aspects of the disorder seem to spontaneously improve.

Therapists who believe in Acquired Situational Narcissism or cultural narcissism naturally see positive results with major shifts in the environment. Thus, Jennifer, a woman known even among her most competitive colleagues as a "heartless litigator and shameless self-promoter," found herself in a crisis when a disaster threatened the lives of her parents and siblings. Although it was with great regret and some anger, she "temporarily" returned to the small town in British Columbia to which they had relocated, to "see to their affairs and *protect my inheritance.*" Out of the San Francisco legal environs, she experienced a "new world" in which she didn't have to prove herself at all. In the course of her six-month stay, and the deaths of both parents, she found, for the first time, an ease with herself and a relationship with a man who "should have been beneath me." She decided to remain in British Columbia, transition to a far less aggressive career, and was reportedly happy for the first time in her 45 years. Ironically, that spring, her name appeared on a magazine touting the toughest ten lawyers in California. For the first time in her life, the accolade was unimportant.

CONCLUSION

Narcissism is both a set of character traits and a personality disorder. It is characterized by an intense focus on form over substance. Whether it appears in its grandiose, entitled form or as a constant fear that the true needy self within will be discovered, it can be devastating to an individual, to those around him, and indeed to a whole culture.

We need to work to prevent the lack of empathy within our families and institutions. The remedies include education, social safety nets, universal health care, including mental health care, and social support through our churches, schools, corporations, and government. The quality of parenting that our children receive as well as the institutions and environments in which they live have a profound impact on the psychological health of these future adults—our future culture and world community. A better balance between individualism

and collectivism is essential, as is a focus on more substance. As any novice engineering student can describe, *form follows function*, not the reverse.

NOTES

1. Thomas Bullfinch, *Bullfinch's Mythology* (New York: Avenal, 1978), 101.
2. Ibid., 102.
3. Ibid., 103.
4. Ibid., 104.
5. Theodore B. Veblen, *The Theory of the Leisure Class* (1899; repr., New York: Modern Library, 1934).
6. Christopher Lasch, *The Culture of Narcissism: American Life in an Age of Diminishing Expectations* (New York: Norton, 1979).
7. Richard L. Rapson, *American Yearnings: Love, Money and Endless Possibility* (Lanham, MD: University Press of America, 1988).
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9. Sigmund Freud, *Totem and Taboo*, standard ed., vol. 13 (1913; repr., London: Hogarth Press, 1955).
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13. S. De Carlo, "CEO Compensation," *Forbes*, April 21, 2005, http://www.forbes.com/2005/04/20/05ceoland.html.
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17. Thomas G. Paterson and Dennis Merrill, eds.., *Major Problems in American Foreign Relations*, vol. 2, *Since 1914: Documents and Essays* (Lexington, MA: D.C. Heath and Company, 1995), 539.
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21. Lasch, *The Culture of Narcissism*.
22. Sigmund Freud, *Group Psychology and the Analysis of the Ego*, standard ed., vol. 18 (London: Hogarth Press, 1921).

23. Lasch, *Culture of Narcissism*, 53–54.

24. Dale Carnegie, How to Win Friends and Influence People, reissue ed. (1937; repr., New York: Pocket Books, 1990).

25. Norman Vincent Peale, 1898–1993, was on the radio for over 50 years preaching a message of positive thinking. Growing up with strong inferiority feelings he developed and refined the message that anyone could overcome such a childhood with faith and positivity.

26. American Society for Aesthetic Plastic Surgery, "11.9 Million Cosmetic Procedures In 2004," American Society for Aesthetic Plastic Surgery, February 17, 2005, http://surgery .org/press/news-release.php?iid = 395.

27. There are media doctors with credentials that are somewhat related to counseling (Ruth, Laura, Phil), but they also focus on observable rather than inner shifts.

28. Lasch, *Culture of Narcissism,* 59.

29. Ibid., 60.

30. Daniel Boorstin, *The Image: A Guide to Pseudo Events* (New York: Atheneum, 1972), 204.

31. Otto F. Kernberg, *Borderline Condition and Pathological Narcissism* (New York: Jason Aronson, 1975), 234.

32. William H. Whyte, *The Organization Man* (New York: Simon and Schuster, 1956).

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Anger Disorders: Diagnosing an Unrecognized Mood Disorder

Heather C. Lench

Every day we are presented with bad news—men beating their wives, spouses killing each other, teenagers with guns at school, a father who shoots his son's coach for kicking the son off a high school football team. Media, video games, television, and parenting are all blamed for these tragic events. But these situations share another common factor. The perpetrators of violence were probably all angry for some reason. Some of these people may have suffered from a mental disorder characterized by chronic or intense anger. Although societal factors and parenting no doubt affect whether a person will become violent, anger disorders are treatable, and such treatment may reduce rates of violence.

Identifying who has an anger disorder is complex and difficult for the average person and for trained clinicians alike. Above are extreme examples, but what about instances from everyday life? A normally calm woman becomes an angry whirlwind behind the wheel of her car—a driver who pulls in front of her is likely to be cursed, given obscene hand signals, and honked at repeatedly while she drives a foot from the bumper. A man regularly becomes angry with his closest friend and punishes the friend by refusing to talk to him or to show up for their carpool in the morning. A woman is frustrated that a coworker may get promoted before her and begins to spread nasty rumors about the coworker. Which, if any, of these people has an anger disorder? Who would benefit from treatment for anger?

Unfortunately, relatively little is known about anger disorders or their treatment. There is evidence that a significant portion of the population may suffer

from anger disorders and that people with anger disorders are more likely to be violent. In the past decade, there has been a surge in the number of people referred for anger management treatment by the legal system and various programs. People are frequently mandated to attend treatment after committing domestic violence or child abuse offenses or after causing significant disturbance at work. Yet clinicians do not have guidelines to treat these individuals, and there is no official set of diagnoses for anger disorders.[1] The lack of a diagnosis for people suffering from anger disorders translates into fewer studies on the disorders and their treatment. It also means that researchers and clinicians cannot compare notes on what qualifies as an anger disorder. Often it is not clear if people in anger management treatment actually have an anger disorder that would benefit from treatment. This chapter will review existing and proposed anger diagnoses, issues related to diagnosis, and treatment strategies.

WHAT IS ANGER?

Multiple dimensions are used to describe how people experience anger. Anger is accompanied by physical reactions. These include changes in arousal, increased muscle tension, and changes in hormone and neurotransmitter functioning. These physiological reactions lead to the "pumped up" or "flushed" feeling people often have when angry. The heart beats faster, adrenaline releases, and the body prepares for action.[2] Anger is also related to changes in cognition. Essentially, anger leads people to attend to, process, and remember information related to their anger. A husband and wife arguing about finances are likely to notice new clothes on the other person, think about their spouse's spending habits, and remember past occasions when their spouse failed to be frugal. These cognitions often lead to even more anger, potentially creating an escalating cycle. Anger includes a phenomenological component as well, which is the subjective awareness and labeling of angry feelings. Physiological, cognitive, and phenomenological components of anger are internal—the person experiencing anger is aware of them, but an outsider would not be. The final component often described in definitions of anger is behavioral. Behavioral expressions of anger include facial changes, verbalizations, and behaviors. An observer often determines if someone is angry using these behavioral cues.

EXISTING ANGER DISORDERS

Anger is a part of several existing psychiatric disorders defined in the *Diagnostic and Statistical Manual of Mental Disorders (DSM–IV–TR)*.[3] This is the official manual used for the diagnosis of mental disorders by every clinician who diagnoses or treats clients. Intermittent explosive disorder most resembles

an anger disorder, but it is focused on behavior, not emotion. It is defined as an impulse control disorder not classified elsewhere in the manual, and its defining feature is aggression out of proportion to the situation. Essentially, it is characterized by discrete episodes where the person "fails to resist aggressive impulses and this failure of control results in assaults or property destruction" (p. 663). The diagnosis cannot be given if the person also demonstrates depression or anxiety. Irritability and rage are explicitly mentioned as possible affective symptoms, but they are not required for diagnosis. The manual suggests that these outbursts of anger and aggression are the result of an underlying personality disorder.

Anger is explicitly mentioned in several personality disorders listed in the *DSM–IV–TR*. This is potentially problematic for people with anger disorders because treatment for personality disorders is not usually covered under insurance plans. Personality disorders are considered difficult to treat, often requiring years of therapy and resulting in little or no change. There is no evidence that problems with anger necessarily result from personality disorders, and, as will be discussed shortly, anger can be effectively treated. Three personality disorders include anger or anger-related cognitions. Paranoid personality disorder is described as "a pattern of pervasive distrust and suspiciousness of others such that their motives are interpreted as malevolent" (p. 690). In other words, paranoid personality disorder is associated with an exaggerated tendency to read threats into situations, a tendency that is also associated with anger. Antisocial personality disorder is associated with disregard for and violation of the rights of others. The *DSM–IV–TR* lists "irritability and aggressiveness, as indicated by repeated physical fights or assaults" (p. 706) as one of the primary symptoms. One of the primary symptoms of borderline personality disorder is unstable mood and mood reactivity, including intense periods of sadness, anger, or anxiety. Anger is also listed separately as a symptom when it is inappropriate and intense or the person has difficulty controlling the anger, as evidenced by frequent anger episodes, constant anger, or recurrent physical fights.

In practice, problematic anger is conceptualized as a subtype of existing mood disorder diagnoses. For example, a person who meets criteria for a depressive disorder and is also suffering from frequent anger and aggression would be diagnosed as having a depressive disorder not otherwise specified. This practice creates a barrier to the proper treatment of people suffering from anger disorders. If anger is considered a minor part of other presumably more pressing symptoms, clinicians may not address issues related to anger, and these problems may go untreated or cause attempts at therapy to fail. When angry people decide (or are forced) to attend therapy, they either are not diagnosed or are given a diagnosis that does not capture the emotional quality of their disorder—insurance will not

pay for treatment of a disorder that does not exist. This misdiagnosis can lead to increased feelings of being misunderstood and not connected to the therapist and may lead to the wrong treatments. Imagine a man who is primarily angry all the time and seeks therapy. The therapist tells him he is depressed with irritable mood, but the man does not feel depressed—just angry. Is he likely to be invested in treatment? Is he likely to feel that he is being treated correctly, and will he have faith that he can improve if the therapist does not even seem to understand his issues? The problem of diagnosis is compounded by the fact that depression, anxiety, and anger frequently present together in the same patient as comorbid disorders.[4] There is pharmacological and psychological evidence, however, that dysfunctional anger exists in people who do not have symptoms of anxiety or depression.

PROPOSED ANGER DISORDERS

Eckhardt and Deffenbacher have proposed several anger diagnoses and criteria.[2] Generally, they propose diagnoses for anger disorders that include angry affect, physiological responses, cognitive indices of anger, and verbal or physical aggression. Adjustment disorder with angry mood is characterized by an angry mood in response to a specific stressor that occurs within three to six months after the stressor. Situational adjustment without aggression is characterized by an intense reaction to a specific event that lasts longer than six months and is accompanied by physiological arousal and minimal aggression. Eckhardt and Deffenbacher also propose a situational adjustment with aggression, which is similar to the previous diagnosis with the addition of persistent aggression. General anger disorder without aggression is characterized by chronic and pervasive anger that occurs more days than not for at least one year, and the person is not without anger for more than one month. A similar category is proposed for general anger disorder with aggression. In sum, the proposed anger disorders include acute reactions, intense reactions out of proportion to the situation, and chronic anger.

Several additional factors may need to be included in anger diagnoses. For instance, people may experience intense anger in response to specific stimuli.[5] Just as someone with a specific phobia may experience intense anxiety in the presence of spiders, people may experience intense anger in the presence of certain cues. The cues that cause anger episodes may be consistent enough to be generalized into broad categories, as is the case with phobias, or they may be specific to each person. More research is needed, but one can imagine categories of situations that might elicit inappropriate anger responses—perhaps including jealousy, driving, or competition.

Multiple anger diagnoses have been proposed, but there is currently little evidence for or against these diagnostic categories. They are based on the factors associated with anger and the framework for diagnosing the other mood disorders of anxiety and depression. Researchers are currently developing evidence for the diagnostic categories, but it will be a long and difficult process unless public interest turns to understanding anger disorders. Work in this area may also be slowed by fears that diagnosing anger as a mental disorder could make people feel less responsible for controlling their anger and could be used in court to reduce legal culpability. The latter fear is related to a phenomenon already present in the legal system. "Crimes of passion," which are for the most part episodes of intense anger, are already a mitigating factor in the legal system. For instance, a man who kills his wife and her lover in a fit of rage upon discovering them in bed is held less responsible than a man who killed his wife in order to receive a large insurance check.

WHY DO PEOPLE BECOME ANGRY?

Part of the reason that there is disagreement about whether anger disorders should be a diagnoses is ongoing debate about what causes anger. Some researchers describe general determinants of anger. For example, Berkowitz argues that the presence of aversive conditions increases the likelihood of anger.[6] Other approaches attempt to identify the circumstances that cause anger and the results of anger in those circumstances. Appraisal theories of emotion consider anger to occur when several circumstances are met in the environment, although there is disagreement about the exact nature of these circumstances. The most inclusive explanation is that anger results when a goal is blocked but still attainable with additional effort.[7] For example, children judged that a boy with an injured leg would feel angry if he had to rest until it was better and would feel sad if he would never be able to use the leg again, irrespective of whether the leg injury was intentionally caused or not.

When people appraise that a goal is blocked, resulting anger motivates additional effort to attain the goal. This additional effort can increase the likelihood that the goal will be attained. This explanation of anger can explain why people often feel angry at other people.[2] If someone is intentionally blocking a goal, the goal can still be reached with additional effort if the person is removed. For example, if you are late for work and the person in front of you is driving at 25 miles per hour, it is likely that feeling angry and speeding around him or her will get you to work faster. Anger serves a similar motivating function even if there is no one to blame. If your computer crashes, feeling angry can motivate you to quickly take your computer to be fixed and perhaps invest in recovering

the lost hard drive material. Viewing angry people as striving for blocked goals has not yet influenced research on anger disorders, but it is possible that anger disorders are caused by tendencies to see goals as obstructed or to see failed goals as attainable. Angry people may have impossible standards for other people, and, when they cannot reach these standards, those with an anger disorder may believe others are responsible.

IS ANGER ALWAYS BAD?

Anger has a bad reputation—it has a long history of being blamed for many of the ailments of society and incidents of tragic violence. Anger is often equated with the loss of control and reversion to animal instincts.[8] Ancient Roman writers described it as a madness that impaired rationality and civility. The Stoics, known for their military dominance, regarded anger as a useless emotion, even in war or competition. Although anger often precipitates violence and aggression, people are often angry without being aggressive and people are often aggressive without being angry. People can be aggressive when they want to pressure someone to do their wishes, even if they are not angry.

In fact, aggression follows very few anger episodes. Averill asked a large number of people to describe anger in their own lives.[9] They reported that physically aggressive behaviors followed only about 10 percent of angry episodes, and nearly one-third of these were incidents of spanking a child to correct behavior. There was a relatively higher rate of verbal aggression in nearly half of all the reported angry episodes. However, both types of aggression were reported less often following anger than talking things over and doing something calming. Aggression may be an attempt to deal with blocked goals when other attempts to resolve the problem have failed, and it is only one of the possible behaviors that follow anger.

Anything more than mild irritation is sometimes described as inappropriate and a result of irrational thinking. However, the evidence does not seem to support this view.[10] Aristotle regarded anger as a useful emotion, if properly controlled, because it prevents injustice.[8] Anger motivates change, which is sometimes needed. People who described angry incidents reported that anger often led to positive outcomes. Both the angry person and people who were targets of anger reported positive consequences, including resolution of problems and social sharing.[9] People often feel empowered, in control, and potent when they are angry, which can lead people to resolve problems when needed.[11] People who do not become angry, even when it is appropriate, are in many cultures regarded as pushovers inviting more punishment.

HOW DO YOU TELL IF ANGER IS DYSFUNCTIONAL?

One way to identify dysfunctional anger is to look at how well it serves the needs of the person.[12] If anger leads to discussing a problem and reaching a positive conclusion, then it is functional. If anger leads to attacking someone and facing legal or social consequences, then it is not functional. An example of the same situation that results in functional and dysfunctional anger may help make this point clear. Fred and Roger both take a date that they really want to impress to a local restaurant. Both men encounter an acquaintance that proceeds to tell embarrassing jokes about their personal hygiene. Both are having their goal of making a good impression on the date threatened by this intrusion, and, as a consequence of this blocked goal, both become angry. Fred proceeds to make an intelligent quip about the other man and asks the man to excuse them, after which he and his date laugh about the intrusion. Roger becomes red in the face, rudely insults the man, and violently pushes the man away from his date, after which his date is embarrassed and frightened and Roger is asked to leave the restaurant for causing a disturbance. People with dysfunctional anger may not be able to deal effectively with stress and may become frustrated, which can lead to increased anger.[12,13] In the example, Roger did not cope effectively and created an even more stressful situation—not only has he failed to impress his date but he has been publicly embarrassed and frightened his date. Roger becomes frustrated at his terrible failure and experiences even more anger the next time he is embarrassed.

Another sign that anger is not serving the needs of the person is if it has health consequences. Anger can be expressed outward toward others or inward toward the self. It was once believed that expressing anger could be cathartic and reduce internal suffering, but the evidence does not support this suggestion. Directing anger inward or outward is associated with serious health issues. People who frequently express their anger suffer from higher rates of mental and physical ailments than people who express anger less often.[14] This relationship might be due to the fact that frequent anger expression can cause conflict within social circles, leading to prolonged stress for the individual.

Although anger is experienced from early infancy, the overt expression of anger is very controlled compared to other emotions.[15] There are ways of expressing anger that are more likely to be labeled inappropriate in different cultures.[16] If others deem the way someone expresses anger to be inappropriate, anger is likely to result in more conflict and is unlikely to resolve the situation effectively. For example, Briggs visited an Inuit group that disapproved of the overt expression of anger—they believed anger was potentially destructive and dangerous in their environment, which required cooperation.[17] When

Briggs expressed anger toward outsiders on behalf of the group, she was ostra-cized and viewed as dangerous. Her anger, though justified, did not have a posi-tive effect because she expressed it inappropriately in the cultural context, and therefore it was dysfunctional.

Men and women experience and express anger at similar rates, but what is considered to be appropriate anger expression also varies by gender.[9] Some ways of expressing anger may be viewed as inappropriate for women but appropriate for men, and vice versa. Women are more likely than men to suppress anger or express it through physical symptoms.[18] Men report more aggression.[19] These gender differences in anger expression may be driven by what is socially appro-priate, and violations may lead to negative outcomes. There is some evidence that this is the case. Suppressing anger led to quicker recovery for women, but in men suppression was associated with increased blood pressure and slower recovery from anger.[20] Thus the same anger expression may be dysfunctional depending on whether it fits with standards based on culture and gender.

While defining dysfunctional anger by actions and outcomes can be useful, it does not offer a comprehensive definition that can be used to identify anger disorders. Anger problems and anger expression problems often coincide, but they are not equivalent.[2] If more attention were given to anger diagnosis, other markers of anger could be identified and treated *before* someone is violent or develops a serious illness. The most obvious sign of depression is suicide, but in recent decades a clear set of markers has been developed to identify depression before that point. Having negative effects is definitely part of any diagnosis of mental illness, but it is not the primary component of most diagnoses—it is necessary but not sufficient. Most likely, anger can be dysfunctional and have the potential for negative effects if it is experienced too intensely in relation to the situation, too frequently, or at a constantly elevated level. Anger may also be dysfunctional if the person copes with and expresses anger poorly and thus is slow to recover from an episode or damages social relationships.

WHAT MIGHT CAUSE AN ANGER DISORDER?

The causes of anger disorders are currently unknown because they are not recognized as official diagnoses and therefore are not studied as such. There is, however, evidence about what relates to dysfunctional anger. People who develop an anger disorder may lack the coping or anger expression styles necessary to effec-tively deal with anger. Those who have effective coping skills can resolve a situation that evokes anger in a positive and productive way. Without effective coping, peo-ple may experience an increase in anger as their attempts to resolve the situation repeatedly fail. In addition, their maladaptive attempts at coping may cause social

conflicts as others are affected by their attempts. Over time, ineffective coping can strain the individual and increase conflict. The angry person is likely to experience more frequent and intense anger. Someone who is not coping effectively is likely to continue to feel frustrated by those situations. His or her family and friends are likely to be upset from prior incidents of anger, leading to a more stressful environment. Coping and anger expression likely determine whether people develop anger disorders.

Coping is an attempt to either alter the environment to make it less stressful or to increase personal resources to deal with the stressor.[21] Good coping skills are defined by their effects—those that create positive emotions by changing the situation or changing how one perceives the situation are considered healthy and effective. Coping strategies that are likely to resolve many situations effectively include problem solving, framing the situation into opportunity for positive outcomes, and giving positive meaning to events.[22] Ineffective coping fails to make people feel better and may actually increase negative emotions because the situation is not resolved. For example, Susan becomes angry with a coworker for failing to complete his work, which then falls on her shoulders. If Susan copes by focusing on the opportunity to learn from the task and to impress the boss, it is effective coping. If Susan gets in a screaming argument with the coworker and they are sent to resolve their problem with the boss, it is not effective coping and can prolong the stress of the original event.

Angry people report potentially problematic coping styles. They tend to focus on solving the problem less and use more aggressive and antisocial actions.[23,24] In other words, angry people are more likely to focus on retaliation and less likely to focus on developing ways to solve the problem. People referred for anger management treatment also report that they typically did not seek social support to help them cope.[23,24] People perceive friends and family as less supportive and less available when they are angry, and thus people with an anger disorder may be less likely to seek out people for support.[25]

Angry people also express their anger differently. Expressing emotion in ways that are not socially acceptable is likely to lead to social conflict and be dysfunctional. For example, in many societies physical violence and verbal abuse are considered dysfunctional, and in many countries there are laws prohibiting abuse. If the cultural rules indicated that anger should result in physical violence toward spouses, then it would not cause social conflict and would not be dysfunctional. Those with anger disorders are likely to express anger in ways that violate the cultural systems for expressing emotion. People high in trait anger reported that they express anger in a number of potentially problematic ways. These include directing anger toward themselves, physical assault on

people, physical assault on objects, noisy arguing, verbal assault, and nonverbal negative action such as glaring or giving the finger.[23]

Angry people report fewer positive ways of expressing anger, including less reciprocal communication and fewer time-outs to calm down. They also maintain using fewer strategies to control their anger expression. As anyone who has ever been in a heated argument knows, it takes more control to understand the other person's views than to scream that they are wrong. The fact that angry people are less likely to control how they express their anger may underlie many of their expression problems. An intervention targeted at increasing control might also decrease negative expression and increase positive expression.

WHY IS DYSFUNCTIONAL ANGER BAD?

Anger disorders, like other mood disorders that significantly impair functioning, can be devastating for individuals, family, and friends. Although the exact prevalence of anger disorders is unknown and cannot be estimated without an official diagnosis, it is likely that a large portion of the population is affected by anger problems. In a recent survey, 25 percent of college students and 31 percent of people referred for court-mandated anger management treatment met criteria for chronic anger.[23] Anger in these surveys was related to reported problems with friendships, work, and romantic relationships. Therefore, it is likely that anger in this sample was dysfunctional.

Dysfunctional anger has negative effects on health. Anger has consistently been linked to hypertension and coronary problems, both when it is expressed toward others and the self.[2,14] People high in hostility have larger increases in blood pressure following an anger induction in the laboratory and are slower to recover from blood pressure increases.[26] This increased reactivity and slow recovery from anger may stress the physiological system. Anger is associated with increased blood pressure and adrenaline as well as release of other neurotransmitters and hormones. People who do not recover quickly from such episodes can experience damage to their organs and blood vessels. In addition to direct effects of anger on health, anger may change health habits. For example, people are more likely to smoke when angry or if they have an aggressive disposition.[27]

Probably the most devastating effects of anger disorders are on relationships. People with anger disorders are likely to feel alone, misunderstood, and disrespected by those closest to them. Anger, especially if it is out of proportion to what is justified, is likely to cause an angry reaction in others. This may cause conflicts, and potentially the person with a disorder will feel misunderstood and attacked as a result of the conflicts.[25] If angry persons feel that their anger is justified, they may think that others simply do not care enough to correct their wrongs. If they are aware that their anger is not justified, they

may feel out of control and frightened of who they might hurt next time they become angry.

People who were chronically angry or in anger management treatment were less likely to be involved in a romantic relationship and reported fewer friends than people without chronic anger.[23] They experienced the relationships that they did have as poor in quality and conflictual, reporting that their relationships were filled with verbal and physical conflict. Angry people reported more friendships that ended due to conflict and more conflict in their current relationships. Anger also appeared to affect work—angry people reported changing jobs frequently, conflict at work, and less satisfaction with their current job. Angry people likely experience the most conflict in the relationships in which they spend most of their time—angry college students reported more work and school conflicts whereas the older anger management sample reported more conflict in their romantic relationships. This may in part be due to the fact that, over time, angry people strain their social networks, losing friendships and work relationships due to conflict.

People do not usually become angry at strangers—they more often direct their anger toward those they know and love.[9] Within relationships, anger appears to be scripted and well rehearsed.[15] If this script involves violence, it is likely to be repeated every time anger is experienced. Anger has been linked to homicide and domestic violence, as those who become violent are more likely to be high on measures of anger.[2,28] There is also evidence that anger can lead to excessive blaming within relationships. When married people become angry they tend to believe their spouse is intentionally causing the negative events.[15] Dysfunctional anger can lead to a cycle wherein the spouse is perpetually blamed for incidental negative situations. For example, a man who does not receive a promotion at work may blame his spouse because she was not friendly enough at a company lunch.

The prevalence of anger disorders and the effects of these disorders have implications for society as a whole. As mentioned, it is likely that a sizable portion of the population has an anger disorder. Anger is a risk factor for cardiovascular disease and illness. Anger is also associated with negative health behavior such as smoking, which has multiple negative health consequences. Thus, anger disorders are costing society financially for the treatment of those who become ill. In addition, society is affected financially and morally by the violence that can result from dysfunctional anger.

DOES ANGER CAUSE VIOLENCE?

The relationship between anger and violence is complex.[28] In a review of studies that examined the relationship between anger and intimate partner

violence, there was evidence that anger was a factor in violence for men. Men who had become violent toward their spouse reported more anger and hostility than men who were not violent, even when their relationships were equally distressed, potentially indicating the presence of an anger disorder. The authors of this study conclude that men with a history of violence are angrier than men who had not become violent. However, they note that it is not clear whether anger precipitated violence in any particular conflict. In other words, the question of whether men felt angry at their partner before becoming violent remains unanswered. There is good reason that this question has not yet been addressed—it is difficult and unethical to follow potentially violent people and examine what happens when they beat their spouse. There is some evidence that men who become violent may have trouble labeling emotions, and so they experience *less* subjective anger than men who do not become violent.

Anderson and Bushman have proposed several ways that anger can influence violence.[29] First, anger may reduce normal restraints on violence by making aggressive responses feel justified to the person. Anger is intuitively compelling and difficult to ignore. For example, a woman who becomes angry at her child for drawing on the walls may feel that smacking the child is justified by the situation. She might say to herself, consciously or unconsciously, "If it weren't a serious situation, why would I be so upset?" Second, anger can also disrupt the ability to control cognitions and behavior, leading to more impulsive aggression. Anger and controlling its expression require cognitive resources. When resources are strained by anger there are fewer available to control behavior. A man who becomes angry at his wife, for example, is cognitively distracted by anger and is less likely to suppress his urge to hit her. Third, anger is an informational cue and can perpetuate people's focus on the anger-evoking situation, cause them to remember things that made them angry in the past, and prime them to act aggressively. The mother in the example above would be more likely to remember all the past instances when her child misbehaved. Fourth, anger can also influence aggression because it causes physiological arousal—it is much easier to become aggressive with adrenaline flowing, muscles tensed, and increased blood flow than without. The extent to which each of these pathways predicts whether a person with an anger disorder becomes violent is currently not known, but each of these pathways could lead to violence.

Although violence prevention is a top priority for many governmental agencies, there is a general reluctance to acknowledge anger as a potential risk factor for violence. This reluctance may stem in part from the fact that little is known about anger, how to measure it, or when it becomes dysfunctional.[28] In many states, anger management is prohibited as a treatment for domestic violence, partially because of fears that such treatments may not hold perpetrators

responsible for their actions and may overlook other potential causes of violence, such as a need for control and societal tolerance for violence.[28] This is a legitimate concern but should not exclude the possibility that anger management could help at least some perpetrators. Not all men and women who become violent have an anger disorder, but treatment would be helpful for those who do. Dysfunctional anger makes others angry, which may lead them to want to punish violent perpetrators and ignore suggestions that anger treatment may be effective in reducing violence. Anger cannot be an excuse for committing a criminal act or hurting others, but there may be treatments that can effectively reduce violence by addressing anger as a treatable disorder.

CURRENT TREATMENTS FOR DYSFUNCTIONAL ANGER

What is anger management therapy? It's a popular phrase, but what does it mean? For a mental disorder, there is frequently abundant research on what works and does not work with which clients. Additionally, to administer therapy requires a professional license verifying appropriate training in relevant techniques and issues. Because anger is not currently recognized as a mental disorder, there are no guidelines for which therapy to give or who should give it. Anger management groups are conducted by clinicians, nurses, arbiters, and people with no professional licensing requirements. Treatment is often given in groups, and the number of sessions is often determined by courts or insurance. It frequently includes a variety of techniques that seem like they would work or have proven useful with other mental disorders, especially anxiety and depression. The focus is frequently on teaching the person to control his or her anger through various means, including counting to 10 before acting and thinking about the consequences of anger.

There is evidence about what works to treat dysfunctional anger, but it is limited. The research is often confusing and unclear, which may lead clinicians to reject reviewing the literature for guidelines.[30] Several specific problems make the research difficult to interpret. One discrepancy between research and practice is that most research uses volunteer populations, frequently college students, whereas most angry clients are forced to attend therapy. Another discrepancy is in the resources available for therapy. As a result, most therapy is conducted in a group format, despite evidence that individual therapy is more effective at reducing anger and promoting long-term behavior changes.

Despite the lack of clarity in the research, there is evidence that therapy improves the functioning of clients with anger problems. Anger management treatment lowers blood pressure rates.[31] There is also specific evidence about

which therapies work from meta-analyses. A meta-analysis reviews all available studies on a topic, in this case the effects of treatment on anger, and analyzes all of the results collectively. Thus, it is a powerful technique to examine what works and what does not work. Several such reviews have been conducted and have generally found that multiple types of therapy have moderate to large effects in treating angry clients and were beneficial.[32,13]

Therapies that target multiple components of anger may be especially effective. As mentioned, anger is related to physiological responses, cognitions, subjective awareness of anger, and behavior. One multicomponent treatment is stress inoculation therapy. This therapy is one of the most frequently used to treat anger and appears to have a moderate treatment effect.[1] Clients with anger problems treated with this type of therapy are on average better off than 76 percent of clients not treated with the therapy. Novaco, the developer of stress inoculation therapy, views anger as a response to specific situations due to cognitive, emotional, and behavioral variables within the person.[33] For example, imagine a man who is overlooked for a promotion at work and has a dysfunctionally angry response. This response is determined by his thoughts (he's never treated fairly and it's probably the fault of that guy who always kisses up to the boss), his emotions (he's generally in a bad mood anyway and this is really the last straw—he can barely breathe he's so mad!), and behavioral repertoire (well, yelling at his boss is all he can think to do).

Stress inoculation therapy focuses on addressing these dimensions through cognitive preparation, skill acquisition and rehearsal, and application of learned skills during mildly stressful imagined or role-played situations. In therapy, the man above would learn to identify situations that typically make him dysfunctionally angry and address the cognitions that lead to an inappropriate response. To learn control over his angry behaviors, he would learn relaxation techniques and then use those techniques during increasingly stressful situations, either role-played with the therapist or imagined.

There is additional evidence of some strategies that may be useful during treatment, although they have not been systematically investigated. One such strategy is derived from dialectic behavior therapy, a technique developed for treating suicidal clients.[34] This strategy places specific emphasis on teaching clients to tolerate physical and emotional distress and targeting specific areas for change while accepting the person as a whole. These techniques may be particularly useful for people with anger disorders, who have difficulty tolerating distress and may feel more understood if attention were placed on changing specific behaviors instead of the whole self.

Another strategy that may be useful is to involve family and friends in the treatment process. People referred to anger management treatment reported

seeking social support during stress less often than others.[23] Involving spouses, family, and friends in the treatment program may help to create a nurturing environment that could assist in reducing angry outbursts. Feindler has developed a treatment strategy for adolescents that includes family involvement.[35] A similar approach for adults may be useful. Physical exercise may also be a useful strategy because it may help alleviate the coronary heart risks associated with high anger as well as normalize physiological reactions during stress.

Another strategy that may be effective in treating anger is to tailor the treatment to the problem. In their review of treatments for anger, Del Vecchio and O'Leary found indications that the type of anger treatment that is most effective depends on the type of anger problem being treated such as road rage while driving.[36] While this makes intuitive sense, it is impossible to determine which therapies are effective for various problems without there being commonly recognized anger disorders. The type of treatment that is effective may depend on a variety of factors that have yet to be explored. For example, therapy with people who tend to blame others may require a different approach than with people who blame themselves. Likewise, people who physically assault others may require a different approach than people who use passive-aggressive strategies to retaliate against people.

ANGER PROBLEMS AND THE BRAIN: ARE THERE OTHER OPTIONS?

During the medieval ages, philosophers believed that people with angry temperaments had an excess of yellow bile.[8] Although this is no longer a plausible medical explanation, the exact physiological causes of anger are unclear. There are decades of evidence that dysfunctional anger can be caused by damage to the brain.[37] A case example of this influence is shown in Phinneus Gage. In the 1800s, he worked with the railroad laying track. He was regarded by coworkers as a gentle and good-humored man. During his work, a tamping iron was accidentally blown through his head. He recovered from the physical injury fairly well, but his personality underwent a drastic change. He became irritable and angry, often verbally assaulting others.[38] As with other emotions, anger is related to brain functioning, and serious organic injury can lead to dysfunction.

There is also evidence that dysfunctional anger may be related to specific neural dysfunction within the brain. Fava and his colleagues describe multiple case histories of people suffering from what they call "anger attacks."[39,40] These are brief episodes of anger out of proportion to the situation and accompanied by physiological symptoms. Anger attacks are similar to panic attacks, but people experi-

ence themselves as angry, not anxious. They treated clients who presented with these attacks with medication and saw significant improvements. The patients generally had no anger attacks after treatment but began having anger attacks within a few days if they stopped medication. Patients improved when treated with antidepressant drugs at lower doses than would normally be required to treat depression. Their findings and subsequent research indicate that anger attacks are likely caused by serotonin deficiencies. Serotonin is a neurotransmitter that is also implicated in depression.

It is unknown whether a similar treatment would be helpful for people with other anger disorders, but the findings thus far justify further investigation. Typically, people with anger disorders are taught to control their cognitions and behaviors during therapy. This therapeutic process could be facilitated by the use of medication to treat some of the potential neurological causes of anger problems. This step would require that anger disorders be recognized as treatable mental health disorders worthy of attention. If the use of medication could reduce violence and health consequences, it is likely worth further research into anger disorders and their potential treatments.

THERAPY RECOMMENDATIONS

Treating angry clients is difficult. Generally, clinicians attempt to build a therapeutic alliance, to ally themselves with the client so they are both working on the same issues. Angry clients are especially likely to be forced into therapy against their will and therefore may not recognize their anger as a problem and may be unwilling to address it. They may see their problem as caused by others, and they may seek the therapists' help to convince the others that they are wrong.[41] Nearly all recommended treatment packages for dysfunctional anger begin with developing a therapeutic alliance and identifying the client's specific motives for changing his or her anger.[30] To assist a client in becoming aware of and willing to change dysfunctional anger, Deffenbacher recommends several techniques.[42] Increasing awareness of the consequences of anger and identifying suppressed anger may help clients become cognizant that anger is central to their difficulties. Focusing on anger as a problem can be reinforced by reframing anger as contrary to clients' self-identity and reducing the tendency to blame others. Strategies that focus on external cues, such as behavioral therapy, may be more effective in the beginning stages of therapy. Such strategies fit with the clients' mind-set of blaming others or situations for their difficulties, and clients may be more willing to participate in a therapy with this focus.

Therapists are also at a disadvantage when dealing with angry clients because they are not trained to handle clients who become angry at them. Professional

therapists report that clients often become angry in session, and they perceive anger directed toward them as a highly stressful experience, almost as stressful as suicidal statements.[43] Most clinicians report emotional reactions to a client who is verbally abusive in therapy.[44] Therapists are only human, and they are likely to become angry or afraid when someone is aggressive toward them. A therapist has to learn to manage his or her own emotional reactions in order to be effective working with angry clients.

CONCLUSION

Despite growing concern with societal violence and high rates of homicide and abuse, there is insufficient research on anger or how to treat it. It is likely that anger disorders are highly prevalent in our society, and the effects of these disorders are often devastating for the individual, the family, and society as a whole. There is no diagnosis for anger disorders, which hinders research on the disorders and treatments. The lack of diagnosis also makes it difficult for people with anger disorders to get therapy. They may be misdiagnosed and treated for the wrong disorder, or their insurance may refuse to pay for treatment. In order to establish a diagnosis, it is critical that the research community explore criteria for mood disorders in the *DSM–IV–TR* and whether anger disorders can be distinguished diagnostically from other mood disorders such as depression and anxiety.

After reading the descriptions in this chapter, can you identify whether the people at the beginning of the chapter have an anger disorder? What types of treatments do you think might be effective for each of these people? More than likely, it is still difficult to easily identify who has an anger disorder and how to treat them. Perhaps the 21st century will see the recognition of anger disorders and the development of appropriate treatments for them.

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An Overview of Pathological Gambling

Mark Griffiths

Gambling is one of the few activities that cuts across all barriers of race, class, and culture. Almost all surveys into gambling on a national level have concluded that there are more gamblers than non-gamblers but that most participants gamble infrequently.[1] Estimates based upon survey data from countries all over the world indicate that the majority of people have gambled at some time in their life.[2]

The introduction of national lotteries, the proliferation of gaming machines, the expansion of casinos, and the introduction of new media in which to gamble (e.g., Internet gambling, mobile phone gambling, interactive television gambling) have greatly increased the accessibility and popularity of gambling worldwide and, as a result, the number of people seeking assistance for gambling-related problems.[1] Commissions and official government reviews in a number of countries including the United States, the United Kingdom, Australia, and New Zealand have all concluded that increased gambling availability has led to an increase in problem gambling.

Despite token recognition of the complexity of gambling behavior, most research has been rigidly confined to narrow areas of specialization. Singular theoretical perspectives (e.g., behaviorism, cognitivism, addiction theory) have been assiduously pursued with few attempts to establish links or contrast them with other research programs. This assumes that a single explanation or theory is sufficient to explain every aspect of gambling behavior and that rival perspectives are thereby misguided. Yet, as a number of authors assert, this may not be so.[3–5]

Gambling is a multifaceted rather than unitary phenomenon.[4,5] Consequently, many factors may come into play in various ways and at different levels of analysis (e.g., biological, social, or psychological). Theories may be complementary rather than mutually exclusive, which suggests that limitations of individual theories might be overcome through the combination of ideas from different perspectives. This has often been discussed before in terms of recommendations for an "eclectic" approach to gambling[6] or a distinction between proximal and distal influences upon gambling.[7] However, for the most part, such discussions have been descriptive rather than analytical, and so far, few attempts have been made to explain why an adherence to singular perspectives is untenable. Accordingly, the aim of this chapter is to highlight limitations of existing theories of gambling at three increasingly specific levels of analysis: social, psychological, and biological.

Central to this view, no single level of analysis is considered sufficient to explain either the etiology or maintenance of gambling behavior. Moreover, this view asserts that all research is context-bound and should be analyzed from a combined, or biopsychosocial, perspective.[5] Variations in the motivations and characteristics of gamblers and in gambling activities themselves mean that findings obtained in one context are unlikely to be relevant or valid in another.[8] In each of the following sections, broad details of each level of analysis are provided, followed by discussions of the limitations and interdependence of each theoretical approach and the implications for research and clinical interventions.

PATHOLOGICAL GAMBLING: PREVALENCE AND HISTORY

Estimates of the number of probable adult pathological gamblers vary from just under 1 percent in the United Kingdom, 1.1–1.9 percent in the United States, and 2.3 percent in Australia.[2] These surveys have also indicated that pathological gambling is twice as common among males as it is among females, that nonwhites have higher rates than whites, and that those with poor education are more likely to be pathological gamblers.[1,2] In 1980, pathological gambling was recognized as a mental disorder in the third edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM–III)*[9] under the section "Disorders of Impulse Control" along with other illnesses such as kleptomania and pyromania. Adopting a medical model of pathological gambling in this way displaced the old image that the gambler was a sinner or a criminal.

Before the appearance of the *DSM–III* (1980), the subject of pathological gambling had produced an expanding body of literature by psychiatrists, psychologists, psychoanalysts, and social workers and had appeared under a variety of labels including "neurotic," "compulsive," "addictive," "excessive,"

and "pathological."[6] There now seems to be an increased preference among professionals for the term "pathological gambling" to describe individuals with severe gambling problems and this owes much to the consistent efforts of Moran, who argued that the phrase "pathological gambling" is descriptive as opposed to terms like "compulsive" or "addictive," which might suggest specific and homogenous etiologies.[10]

In diagnosing the pathological gambler, the *DSM–III* states that the individual is chronically and progressively unable to resist impulses to gamble and that gambling compromises, disrupts or damages family, personal, and vocational pursuits.[9] The behavior increases under times of stress, and associated features include lying to obtain money, committing crimes (e.g., forgery, embezzlement, fraud), and concealment from others of the extent of the individual's gambling activities. In addition, the *DSM–III* states that to be a pathological gambler, the gambling must not be due to antisocial personality disorder (see Table 4.1).

As Lesieur pointed out, these criteria were criticized for (1) a middle class bias, that is, the criminal offenses like embezzlement and income tax evasion were "middle class" offenses; (2) lack of recognition that many compulsive gamblers are self employed; and (3) exclusion of individuals with antisocial personality disorder.[11] Lesieur recommended that the same custom be followed for pathological gamblers as for substance abusers and alcoholics in the past, that is, allow for simultaneous diagnosis with no exclusions. In addition,

Table 4.1
***DSM–III* Diagnostic Criteria for Pathological Gambling**

The criteria state that maladaptive gambling is indicated by the following:

(A) The individual is chronically and progressively unable to resist impulses to gamble

(B) Gambling compromises, disrupts, or damages family, personal, and vocational pursuits, as indicated by at least three of the following:

    (1) Arrest for forgery, fraud, embezzlement, or income tax evasion due to attempts to obtain money for gambling
    (2) Default on debts or other financial responsibilities
    (3) Disrupted family or spouse relationships due to gambling
    (4) Borrowing money from illegal sources (loan sharks)
    (5) Inability to account for loss of money or to produce evidence of winning money if this is claimed
    (6) Loss of work due to absenteeism in order to pursue gambling activity
    (7) Necessity for another person to provide money to relieve a desperate financial situation

(C) The gambling is not due to Antisocial Personality Disorder

Source: American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders*, 3rd ed. (Washington, DC: American Psychiatric Association, 1980).

the criteria leave out the "problem gambler" who by self-admission, or by others' testimony, spends a disproportionate amount of time gambling but has yet to produce the serious consequences laid down in the *DSM–III*. The new criteria in the *DSM–III–R* (see Table 4.2) were subsequently changed, considering the criticisms and thus now modeled extensively on substance abuse disorders due to the growing acceptance of gambling as a bona fide addictive behavior.

However, in 1989, Rosenthal conducted an analysis of the use of the *DSM–III–R* criteria by treatment professionals.[12,13] It was reported that there was some dissatisfaction with the new criteria and that there was some preference for a compromise between the *DSM–III* and the *DSM–III–R*. As a consequence, the criteria were changed for *DSM–IV*[14] (see Table 4.3).

PHASES OF THE PATHOLOGICAL GAMBLER'S CAREER

The acquisition, development, and maintenance of pathological gambling is an area that is continually disputed. The exact causes and reasons for continuing gambling behavior seem to be dependent upon the individual, but there do seem to be some general underlying factors and re-occurring themes. Problem gambling generally begins in adolescence and may start following a major life stress, for example, the death of a parent or birth of a first child.[15] Such events may induce a need to escape from the problems of reality.

Lesieur and Custer have concluded that pathological gambling behavior consists of three stages—the winning phase, the losing phase, and the desperation phase.[16] The winning phase normally begins with small but

Table 4.2
DSM–III–R Diagnostic Criteria for Pathological Gambling

The criteria state that maladaptive gambling is indicated by four of the following:

1. Frequent preoccupation with gambling or obtaining money to gamble
2. Person often gambles larger amounts of money or over a longer period than intended
3. Need to increase the size or frequency of bets to achieve the desired excitement
4. Restlessness or irritability if unable to gamble.
5. Repeatedly loses money gambling and returns another day to win back losses ("chasing")
6. is interpersonally exploitative, i.e., takes advantage of others to achieve his or her own ends
7. Person often gambles when expected to fulfill social, educational, or occupational obligations
8. Person has given up some important social, occupational, or recreational activity in order to gamble
9. Person continues to gamble despite inability to pay mounting debts or despite other significant social, occupational, or legal problems that the individual knows to be exacerbated by gambling

Source: American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders*, 3rd ed., rev. ed. (Washington, DC: American Psychiatric Association, 1987).

Table 4.3
DSM–IV Criteria for Pathological Gambling

(A) Persistent and recurrent maladaptive gambling behavior is indicated by five (or more) of the following:

    (1) is preoccupied with gambling (e.g., preoccupied with reliving past gambling experiences, handicapping or planning the next venture, or thinking of ways to get money with which to gamble)

    (2) needs to gamble with increasing amounts of money in order to achieve the desired excitement

    (3) has repeated unsuccessful efforts to control, cut back, or stop gambling

    (4) is restless or irritable when attempting to cut down or stop gambling

    (5) gambles as a way of escaping from problems or of relieving a dysphoric mood (e.g., feelings of helplessness, guilt, anxiety, depression)

    (6) after losing money gambling, often returns another day to get even ("chasing" one's losses)

    (7) lies to family members, therapist, or others to conceal the extent of involvement with gambling

    (8) has committed illegal acts such as forgery, fraud, theft, or embezzlement to finance gambling

    (9) has jeopardized or lost a significant relationship, job, or educational or career opportunity because of gambling

    (10) relies on others to provide money to relieve a desperate financial situation caused by gambling

(B) The gambling behavior is not better accounted for by a Manic Episode.

Source: American Psychiatric Association, _Diagnostic and Statistical Manual of Mental Disorders,_ 4th ed. (Washington, DC: American Psychiatric Association, 1994), 618.

successful bets in adolescence. Early wins prompt more skillful gambling, which usually leads to larger winnings. Most social gamblers stop at this stage. However, after a considerable big win maybe equaling or exceeding the individual's annual salary, the gambler accepts the thought that the occurrence can happen again.

The next stage—the losing phase—is characterized by unrealistic optimism on the gambler's part, and all bets are made in an effort to recoup their losses, which has been termed "the chase" by Lesieur.[17] The result is that instead of cutting their losses, gamblers get deeper into debt, preoccupying themselves with gambling, determined that a big win will repay their loans and solve all their problems. Family troubles begin (both marital and with relatives), and illegal borrowing and other criminal activities in an effort to get money usually start to occur.[18] At this point in the pathological gambler's career, family and friends may "bail out" the gambler.

Alienation from those closest to the pathological gambler characterizes the appearance of the final stage—the desperation phase. In a last-ditch, frenzied

effort to repay his or her debts, illegal criminal behavior reaches its height, and when there are finally no more options left, the gambler may suffer from severe depression and have suicidal thoughts. It is then, usually at the insistence of the family (if not the courts), that the gambler must seek help. Because the pathological gambler is impatient, requiring immediate results, help should be aimed at priority areas, that is, legal and financial difficulties, counseling to resolve family and marital problems, and, most importantly, hospitalization for desperate patients who are depressed and suicidal.

More recently, Rosenthal has described a fourth phase called the "hopeless" or "giving up" phase.[12] This is where gamblers know they cannot possibly retrieve their losses and they do not care, leading to play for play's sake.

Explanations of Gambling Involvement

In general, research has consistently shown a positive relationship between the availability of gambling and both regular and problem gambling.[1,19] Whenever new forms of gambling are introduced, or existing forms become more readily available, there is an increase in gambling, suggesting that the demand for gambling products is closely linked to their supply. The more gambling industry infrastructure that is established (e.g., new venues), the larger the range of gambling products (e.g., through the application of new technologies), and the greater the industry's marketing efforts, the more likely people will be to gamble in the first place.

But why is gambling so popular? According to sociologists, gambling is an inherent component of human society,[20] and human beings have a natural penchant for play, risk, and competition. Gambling, they argue, fits easily with cultural values, virtues, and lifestyles,[21] so that when gambling becomes more accessible and socially acceptable, more people will gamble. As a form of social interaction, gambling provides a means by which people can escape the boredom of everyday life, adopt new roles, and enjoy the excitement of the "action," namely, the suspense, anticipation, and social reinforcement resulting from taking risks and being rewarded for one's daring.[22]

Almost all surveys of gambling have shown that these broad motivational factors are central to gambling and that attitudes toward gambling are positively related to availability and cultural acceptability. However, this perspective fails to take into account many key findings and observations in gambling research. Surveys have also shown that not everyone gambles and some people gamble more than others (e.g., pathological gamblers). Research has consistently shown that people often gamble for reasons other than broad social and economic reasons.[23] These other motivations may vary according to personal characteristics

of the gambler and the type of gambling activity. Finally, broad social and economic theories fail to explain why certain gambling activities are more popular or "addictive" than others.

Demographic variations in gambling participation have been observed since surveys were first administered. Typically, gambling has been more popular in lower socioeconomic groups, in Catholics rather than Protestants, in unmarried people, in younger age groups, and in men.[24] Consistent with trends observed in overall participation rates, research has found that the incidence of gambling-related problems is considerably higher in lower socioeconomic groups and in younger people, and it is more likely to be associated with slot machine gambling, one of the few activities that attract similar numbers of men and women.[24] Accordingly, understanding demographic variations in overall participation is vital if one is to estimate the likely social effects of expansion or product changes in existing gambling markets.

Variations in gambling preferences are thought to result from differences in both accessibility and motivation. Older people tend to choose activities that minimize the need for complex decision making or concentration (e.g., bingo, slot machine gambling), whereas gender differences have been attributed to a number of factors, including variations in sex role socialization,[22] cultural differences,[7] and theories of motivation.[25]

Variations in motivation are also frequently observed among people who participate in the same gambling activity. For example, slot machine players may gamble to win money, for enjoyment and excitement, to socialize, and to escape negative feelings.[26] Some people gamble for one reason only, whereas others gamble for a variety of reasons. A further complexity is that people's motivations for gambling have a strong temporal dimension, that is, they do not remain stable over time.[15] As people progress from social to regular and finally to excessive gambling, there are often significant changes in their reasons for gambling. Whereas a person might have initially gambled to obtain enjoyment, excitement, and socialization, the progression to problem gambling is almost always accompanied by an increased preoccupation with winning money and chasing losses.

The Importance of the Structural Characteristics of Activities

Another factor central to understanding gambling behavior is the structure of gambling activities. Griffiths has consistently argued that gambling activities vary considerably in their structural characteristics, including the probability of winning, the amount of gambler involvement, the amount of skill that can be

applied, the length of the interval between stake and outcome, and the magnitude of potential winnings.[5,27,28] Structural variations are also observed within certain classes of activities such as slot machines, where differences in reinforcement frequency, colors, sound effects, and machine features can influence the profitability and attractiveness of machines significantly.[26] Each of these structural features may (and almost certainly does) have implications for gamblers' motivations and the potential "addictiveness" of gambling activities.

For example, skillful activities that offer players the opportunity to use complex systems, study the odds, and apply skill and concentration appeal to many gamblers because their actions can influence the outcomes. Such characteristics attract people who enjoy a challenge when gambling. They may also contribute to excessive gambling if people overestimate the effectiveness of their gambling systems and strategies (see discussion of cognitive theories below). Chantal and Vallerand have argued that people who gamble on these activities (e.g., racing punters) tend to be more intrinsically motivated than lottery gamblers in that they gamble for self-determination (i.e., to display their competence and to improve their performance).[29]

People who gamble on chance activities, such as lotteries, usually do so for external reasons (i.e., to win money or escape from problems). This was confirmed by Loughnan, Pierce, and Sagris in a clinical survey of problem gamblers.[30] Here, racing punters emphasized the importance of skill and control considerably more than slot machine players. Although many slot machine players also overestimate the amount of skill involved in their gambling,[6] other motivational factors (such as the desire to escape worries or to relax) tend to predominate. Thus, excessive gambling on slot machines may be more likely to result from people becoming conditioned to the tranquilizing effect brought about by playing rather than just the pursuit of money.

Another vital structural characteristic of gambling is the continuity of the activity, namely, the length of the interval between stake and outcome. In nearly all studies, it has been found that continuous activities (e.g., racing, slot machines, casino games) with a more rapid play rate are more likely to be associated with gambling problems.[28] The ability to make repeated stakes in short time intervals increases the amount of money that can be lost and also increases the likelihood that gamblers will be unable to control spending.[31] Such problems are rarely observed in noncontinuous activities, such as weekly or biweekly lotteries, in which gambling is undertaken less frequently and where outcomes are often unknown for days. Consequently, it is important to recognize that the overall social and economic impact of expansion of the

gambling industry will be considerably greater if the expanded activities are continuous rather than noncontinuous.

THEORIES OF GAMBLING BEHAVIOR

Although sociological, situational, and demographic factors can explain why some people are more likely to gamble than others, these theories cannot explain why some people gamble more than others or what factors contribute to behavior maintenance in gambling. Psychological theories become important at this level. Research in this area is remarkably diverse. Almost every major branch of psychology (e.g., cognitivism, behaviorism, Freudian theory, addiction theory) has been utilized in an attempt to understand gambling. Despite this, it is possible to distinguish two broad, general perspectives: first, theories that attribute ongoing behavior and excessive gambling to habitual processes that are the consequences of gambling; second, theories that state that variations in behavior result from variations in the characteristics, or makeup, of individual gamblers. In other words, whereas the first places a stronger emphasis upon psychological determinants of gambling, the second emphasizes biological differences between individuals.

Central to psychological explanations is the idea that every person who gambles has the potential to become a problem gambler. This is because gambling activities are difficult to resist by their very nature: they involve excitement, risk-taking, and the possibility of monetary gains. The more a person gambles, the more difficult it becomes to resist the temptation to commence a gambling session or stop once gambling has commenced.[32] Accordingly, it has been suggested that there is no neat distinction between problem gambling and normal gambling; rather there is a continuum from social gambling to regular gambling to problem gambling.

People who gamble regularly may display many of the same behaviors as people with gambling problems, although to a lesser degree. This view gives rise to conceptualizations of problem gambling that emphasize the developmental and habitual nature of problem gambling behavior rather than individual pathology. This perspective avoids terms such compulsive, addiction, or pathology in preference for terms such as impaired control.[31] Although researchers' views differ concerning the psychological mechanisms behind loss of control, three general classes of theory will be used to illustrate the limitations of psychological accounts. They are behaviorist theories that explain persistent gambling as a conditioned process; need state models that see gambling as a form of psychological or physiological dependence;

and cognitive theories that attribute excessive gambling to erroneous beliefs about the potential profitability of gambling.

Behaviorist Approaches

Both classical and operant conditioning principles have been applied to the study of gambling. In operant explanations for problem gambling,[33] persistent gambling is seen as a conditioned behavior maintained by intermittent schedules of reinforcement, most likely a variable-ratio schedule. This involves the provision of infrequent rewards after varying numbers of responses. On the other hand, proponents of classical conditioning models argue that people continue to gamble as a result of becoming conditioned to the excitement or arousal associated with gambling, so that they feel bored, unstimulated, and restless when they are not gambling. Both the classical and operant perspectives have been central to the development of measures of "impaired control" over gambling[34] and clinical interventions using desensitization, aversive conditioning, and satiation techniques.[2] In each of these examples, it is assumed that the more a person gambles, the more his or her behavior is dictated by factors beyond the person's control.

Despite evidence supporting both theories, neither is entirely satisfactory on its own. Classical conditioning theory seems useful to explain people's motivation to commence a gambling session but appears less useful to explain persistent gambling behavior. Conversely, while operant conditioning might explain ongoing behavior, it appears less useful in explaining why people commence gambling or recommence gambling after a prolonged period of abstinence.[6] Researchers have also raised questions about the extent to which gambling behavior adheres to operant theory at all, since gamblers lose more than they win and because reinforcement magnitudes are not independent of player responses, for example, stake sizes.[33,35] Nevertheless, the importance of subtle variations in machine characteristics upon behavior reinforces the role of operant conditioning in the maintenance of behavior, although perhaps in more subtle ways than was envisaged.[28]

It is important to recognize that these theories cannot stand in isolation. As with other psychological theories, conditioning theories cannot explain why people exposed to similar stimuli respond differently—why some gamble whereas others do not or why some people gamble more than others. In addition, the effectiveness or strength of the conditioning effect may be a function of motivational factors and type of activity. Some, but not all, people gamble for excitement or relaxation, and as discussed above, people satisfy these needs by different activities. Thus, it is unlikely that classical conditioning will affect all

types of gambling or gamblers. Similar difficulties plague attempts to develop general operant theories of gambling. Some activities appear to suit this form of explanation more than others. Examples include slot machines and scratch tickets where there is a short time interval between stake and outcome and where outcomes are entirely determined by chance. It seems more difficult to apply these principles to skilled gambling games such as blackjack, poker, and sports betting, where player decisions can significantly influence outcomes.

Need-State Models and Theories of Addiction

Much of the discussion relating to classical conditioning also applies to need-state theories of gambling, which assume that people gamble to escape unpleasant feeling states such as anxiety, depression, and boredom. These perspectives have been applied to all facets of gambling, including involvement, ongoing behavior, and excessive gambling. They are incorporated into the *DSM–IV* classification for pathological gambling (i.e., gambling as a way of escaping from problems or intolerable feeling states). Although not all researchers agree that these motivations signify the existence of a physiological addiction,[36] most agree that people can become psychologically addicted to gambling.

The concept of arousal has been studied most extensively, but results have not been consistent.[35,37,38] Arousal increases have been observed in some studies but not in others, and most increases have been relatively small. Variations in arousal have neither covaried reliably with the persistence of behavior nor with the onset of gambling sessions. Walker has questioned the explanatory value of arousal theories arguing that the excitement of gambling is unlikely to be independent of people's desire to win money.[7]

Similar problems have plagued attempts to associate gambling with anxiety and depression. While a considerable number of studies have revealed that negative mood states commonly accompany gambling or predict the duration of gambling sessions,[39–43] most analyses have been confined to problem gamblers and high-frequency gamblers. For this reason, it is unclear whether these mood states are also associated with less frequent gambling. Moreover, it is not possible to determine whether mood states precede or arise as a consequence of gambling. Indeed, as Walker points out,[7] it may be that gamblers become depressed as a result of losing more money than they can afford.

Again, the temporal dimension suggests that the role of mood states is unlikely to be independent of the gambler's characteristics. As with arousal, it is unlikely that avoidance of negative feeling states will be common to all activities or all gamblers. For example, slot machines appear to reduce anxiety, whereas racing provides

arousal and excitement. In addition, variations in gambling motivation among participants involved in the same activity suggest that not all people gamble to satisfy unfulfilled needs. It is also unclear why some people apparently have a greater need for arousal or relaxation than others and whether this would be sufficient to explain differences between normal and excessive gambling? It is important to place behavior in a social context to understand how gambling compensates for, or assuages, problems or deficits experienced in other areas of life. Alternatively, as will be suggested later in this chapter, it may be useful to look for dispositional or biological differences to explain the varying motivations and behaviors of individual gamblers.

Cognitive Theories

Despite the fact that the odds of almost all activities are weighted strongly in favor of the house, gamblers continue to believe they can win money from gambling. This observation leads to the conclusion that gambling may be maintained by irrational or erroneous beliefs. For example, people overestimate the extent to which they can predict or influence gambling outcomes and tend to misjudge how much money they have won or lost. This hypothesis has been confirmed in numerous studies showing that people overestimate the degree of skill or control which can be exerted in chance activities,[44,45] and also in studies using the "thinking aloud" method that reveal high levels of irrationality in verbalized statements made during gambling sessions.[46] These findings have been confirmed not only under laboratory conditions but also in ecologically valid gambling settings, using regular gamblers.[46,47]

Based upon these findings, it has been suggested that irrational thinking may be related to problematic gambling behavior,[48,49] with persistent behavior thought to be the result of people's overconfidence in their ability to win money.[7,46,49] Evidence suggests that problem gamblers frequently overestimate the amount of control and skill involved in gambling.[30] Unfortunately, some of these observations have also been made using students with no gambling experience[47] indicating that irrational beliefs are not positively related to level of gambling involvement. A further problem is that irrationality does not appear to covary with other observable facets of gambling, such as the level of risk taking or reinforcement frequency. Alternatively, where irrationality positively relates to involvement, few differences in behavior have been observed. Consequently, Dickerson and Baron have concluded that irrational thinking is probably more a reflection of demand characteristics than a rational underlying behavior.[50] A lot of what people say may only result from the difficulty of trying to come up with rational, meaningful statements in chance-determined situations.

In additional to these conceptual difficulties, it is also possible that contextual factors play a role in cognitive research. For example, Griffiths found

that regular players had greater difficulty than occasional players in verbalizing their thoughts while they were gambling.[46] Regular players seemed capable of gambling without attending to what they were doing, suggesting (a) that cognitive processes did not play a major role in the maintenance of their behavior or (b) that the original justifications or rationales for behavior were less accessible. In either case, Griffiths's observations suggested that temporal factors (e.g., how long a person has been gambling) appear to be important. Therefore, all other things being equal, it appears that valid comparisons cannot be drawn between gamblers with differing levels of gambling experience; for what holds for infrequent gamblers might not hold for regular players, and vice versa.

Finally, it is again important to observe that cognitive theories need to take structural variations in activities into account. Many cognitive processes thought to underlie gambling behavior (e.g., overestimations of control, biased attributions) are more likely to be observed when activities are perceived as having some skill component.[6] With some activities, there is a genuine possibility for skillful play (e.g., racing, blackjack, table poker). The more people play or know about these activities, the greater their awareness of the skills involved. Thus, beliefs about control and skill are neither completely irrational nor consistent across players. Instead, in these situations, researchers must examine the quality of play—for example, to what extent the person adheres to optimal strategies—rather than look for evidence of irrational thinking.[51]

Even in activities where outcomes are chance-determined, there are likely to be variations in the extent to which gamblers' perceive that the outcomes are solely chance-determined (e.g., roulette and craps are probably more likely to be perceived as skillful than Australian slot machines because of the greater complexity of the rules and the possibility for variations in playing strategy). Therefore, it may be ineffective to compare results across studies using different chance activities without controlling for variations in perceived skill.

Biological and Dispositional Theories

Social and psychological explanations are insufficient to explain the full complexity of gambling behavior. Whether ongoing behavior is explained in terms of behaviorism, need-state models, or cognitive theories, it remains unclear why one person gambles more heavily than another. In other words, while it seems likely that increased involvement with gambling is likely to contribute to loss of control over behavior, development of irrational beliefs, and greater psychological dependence, it is important to determine what makes some gamblers more susceptible to these factors than others. It is here that research into biological and personality factors becomes important. Central to this research is to ascertain whether pathological gamblers possess qualities

that would predispose them to excessive gambling. Much of this literature was summarized by Walker,[7] so this discussion is confined to three research areas: whether problem gamblers are particularly disposed toward developing an addiction; whether they have a greater need for arousal; and whether gamblers are naturally more impulsive than non-gamblers.

Studies into the first question have been undertaken by examining overlaps between potentially addictive and problematic behaviors with alcohol, illicit drugs, and gambling. This includes research into problem gamblers with psychoactive substance abuse problems or those who also have drug or alcohol use problems, or both.[43,52–57] The incidence of cross addictions in populations of pathological gamblers has been cited as evidence for the existence of an addictive personality type. In addition, research by Comings and colleagues, for example, has suggested a genetic basis for gambling in some people.[58] They reported that a variant of the dopamine D2 receptor gene (DRD2), which has been associated with other addictions, including alcoholism, was found in 51 percent of pathological gamblers compared with only 26 percent of controls. The effect of this gene was more closely associated with pathological gambling than any other addiction. This suggested that the genetic variants of the DRD2 gene may play a significant role in pathological gambling, which supports the concept that variants in this gene are an important risk factor for addictive behaviors. However, there are some genes that appear to be unique to problem gambling.[59]

Although intriguing, such data does not provide convincing evidence for the existence of a biological basis for gambling addiction. For a start, many pathological gamblers do not have other addictions.[60] Moreover, as Comings and colleagues show, only half of the problem gamblers possessed the so-called gambling gene, suggesting that this gene is not a necessary factor in the etiology of gambling addiction.[58] Finally, researchers have questioned the notion of physiological addiction altogether, arguing that there is very little evidence to support the applicability of traditional addiction models to gambling.[39,60] Not all gamblers experience cravings, withdrawal symptoms, or tolerance in the traditional addictions sense, suggesting that excessive gambling is more likely to arise as a result of other processes. If the term "addiction" is to be used at all, it is better used in a general sense to denote a condition broadly characterized as a repetitive and uncontrollable behavior that has undesirable consequences for individuals and those around them.[6]

Second, attempts have been made to associate gambling with an excessive desire for arousal or risk taking. For example, Brown hypothesized that pathological gamblers are habitually underaroused or understimulated and need gambling to reach an optimal level of arousal.[61] However, the available evidence offers little support for this notion. While studies by Wolfgang and Anderson

and Brown have shown that regular gamblers tend to score higher on measures of sensation seeking than controls,[62,63] other studies have failed to find any associations at all,[64,65] or, paradoxically, studies have found that problem gamblers tend to score lower than population norms on the sensation-seeking scale.[40,66,67] This has been attributed to the fact that problem gamblers tend to engage in a very limited range of activities compared with other people, which limits the number of items endorsed (their scores) on the sensation-seeking scales. Consequently, it seems unlikely that this variable provides a reliable basis for distinguishing problem gamblers from other gamblers.

Thirdly, researchers have tried to associate excessive gambling with the inability to control impulses. This notion was central to the development of the first psychiatric definition of gambling in the *DSM–III*,[9] which classified pathological gambling as a form of impulse disorder, not unlike compulsive stealing (kleptomania) and hair-pulling (trichotillomania). Gamblers were hypothesized to have experiences characteristic of other recognized impulse disorders, such as physical and psychological tension prior to the commencement of gambling and the experience of a strong sense of pleasure or release once the activity had commenced.[68] Implicit in this explanation was the idea that gambling was unplanned, or involuntary, and highly repetitive.

Despite the inconsistency of psychometric evidence on this topic, clinical observations suggest that a loss of control is common to problem gambling.[69] Researchers have argued that there are similarities between problem gambling and children with attention deficit disorder (ADD),[70] in that both are characterized by limited attention spans, impulsive behavior, inability to delay gratification and insensitivity to punishment. Carlton ad colleagues confirmed this by administering a modified ADD scale to a sample of 16 problem gamblers and found that they scored significantly higher on ADD items than a control group.[71] This suggested the possibility that ADD during childhood may be an antecedent to the development of gambling problems in adulthood. Recent psychobiological evidence suggests that such traits can be directly linked to deficiencies in the production of certain neurotransmitters thought to be associated with impulse control. One of these substances is serotonin (5-hydroxtryptamine or 5-HT), which has an inhibitory effect upon the cortex and is associated with more controlled behavior.[68] Several studies of biological markers including the enzyme monoamine oxidase indicate that problem gamblers have deficits in the serotonin system.[72,73] This enzyme is also a marker for impulsivity and sensation-seeking traits. Findings from a variety of other biochemical and pharmacological studies are consistent with the view that problem gamblers are significantly more likely than non–problem gamblers to have impaired serotonergic function.[74]

The question that remains, however, is how researchers will ascertain the direction of causality, namely, whether decreased 5-HT levels are the result, or cause, of excessive gambling. This problem extends to all attempts to draw associations between dispositions and gambling behavior. This indicates the importance of a temporal dimension in gambling. Since gambling is likely to influence the characteristics of gamblers, it may be unwise to assume that observations of one sample can be generalized to other samples of gamblers with different levels of gambling experience.

Physiological accounts assume that such factors should override other environmental or contextual factors and allow for the development of a general theory of gambling addiction. However, this is clearly not so. Apart from the conceptual difficulties associated with determining a causal relationship between characteristics and behavior, these theories are unable to account for the full diversity of gambling patterns and behavior. They fail to explain demographic differences in the preference for activities and variations in motivation. Neither can they explain why some activities are more addictive than others and why the structural characteristics of specific activities (e.g., slot machines) can influence behavior. Therefore, it appears that excessive gambling is likely to result from both dispositional and psychological factors and the complex interaction between them. Psychological explanations must play a role because of the obvious importance of external factors (e.g., environmental and situational variables) in the development of gambling habits. However, it is also clear that internal factors influence how certain individuals respond to these situations. The implications of this observation for the study and treatment of problem gambling are discussed below.

CONCLUSIONS AND IMPLICATIONS FOR RESEARCH AND INTERVENTIONS

In summary, it seems that gamblers are first influenced by sociological factors, for example, the availability of gambling opportunities, attitudes and habits of parents, friends and peer groups, as well as a lack of alternative activities. During the middle stages of development, there are many factors that heavily influence the maintenance of gambling behavior. Three of these factors are schedules of reinforcement, the "escape" qualities of gambling, and cognitive biases, all of which have been summarized in this chapter. While it remains unclear exactly how some people come to gamble excessively, it is agreed that persistent gambling eventually leads to a desperate "spiral of options" where gambling is largely maintained by the desire to win money, recover losses, and pay back debts.[17] Gambling is thus a complex, multidimensional activity that

is unlikely to be explained by any single theory. Instead, this research is best served by a biopsychosocial model that stresses the individual and idiosyncratic nature of the development of gambling problems and emphasizes the role of contextual factors internal and external to the process of gambling itself.[3,5]

Recognition of this complexity has important implications for gambling research both in terms of the selection of samples and data analysis. First, the existence of structural variations in activities suggests that results obtained using one activity cannot be generalized to other activities that are not structurally equivalent. Existing research suggests that continuity and the element of skill involved are two factors that must be similar in order for valid comparisons to be made. Second, studies of gambling motivation are unlikely to be valid unless both individual and situational factors are taken into account. Since motivations differ across demographic groups (e.g., different genders and ages), across activities, and over time, studies must ensure that these factors are controlled before drawing conclusions. Samples should contain equal numbers of men and women of a similar age with similar levels of gambling experience. Alternatively, in situations where this cannot be achieved, gender, age, and experience should be used as covariants, or as the first variables in regression analyses.

Third, in recognition that personality may influence the strength of experimental effects, it is important that researchers match comparison groups in terms of these variables. For example, cognitive experiments investigating the illusion of control should include measures of "desirability for control,"[75] whereas arousal experiments should include measures of gambling motivation. In addition, researchers should not assume that biological differences or psychological factors will explain all gambling behavior. Instead, it may be useful to explore the interaction between these different levels of analysis, for example, by examining whether variations in the structural characteristics of activities (e.g., reinforcement frequency) affect people with, or without, the characteristic under observation.

Implications for Prevention, Intervention, and Treatment

Since sociological factors appear to be critical in the acquisition of gambling behavior, prevention needs to be aimed at the social and situational antecedents. This can be approached from a number of levels (e.g., societal, school, family, individual), some of which may be more practical than others. Since problem gamblers start gambling at a significantly earlier age than non-pathological gamblers, an obvious step would be for governments to legislate against young people gambling (i.e., below 18 years of age). A "blanket ban" on gambling would, in most

cases, reduce acquisition until at least late adolescence. Both parents and peers may model gambling; therefore, the family's role in maintaining gambling behavior should be addressed in therapy, and prevention plans should aim to increase the gambler's contact with non-gambling peers. Also, evidence or knowledge of a gambler's own negative thoughts or feelings about gambling behavior and a gambler's irrational biases may provide useful cues for behavior modification.[6]

These findings have led to suggestions to enhance educational awareness of the dangers of gambling not only among children and adolescents but also parents, guardians, and teachers. Although recommendations of this nature typically tend to focus upon the need for greater awareness of the true odds and the unprofitability of gambling, this approach needs to be applied with caution. It is quite possible for education to have the opposite effect, namely, to increase students' knowledge of how to gamble. In addition, it is questionable whether knowing the true odds has a significant effect upon dissuading people from gambling, given that many problem gamblers are well educated and have, in some cases, some knowledge of basic mathematics. For many, the belief that they are inherently lucky or different from others helps maintain their interest in gambling. Accordingly, educational campaigns that focus upon the negative consequences of gambling and alternatives to it may have greater success. While these sorts of campaigns are unlikely to prevent gambling in all young people, they might reduce (a) the total number of adolescents who start to gamble and (b) the amount of time adolescents spend gambling.

The fact that some gamblers are socially rewarded for gambling cannot be altered directly, but more adaptive personal and social skills can be taught as responses to stress (i.e., emotional antecedents), for example, relaxation, assertion, and social skills training.[6] Alternatively, where people seek the company of other gamblers as a way to escape from unpleasant feeling states or life stress, the development of alternative interests, hobbies, and social networks should be afforded priority during intervention. This approach could also be extended to people who gamble alone. An essential aspect of treatments should be to identify and address the factors that are antecedents to gambling, those that provide the underlying motivation and social and cultural context in which the behavior has developed. Only when these are addressed can treatments be extended to more specific psychological aspects of the behavior itself. This is because these broader social and structural factors influence a person's exposure to gambling, his or her opportunities to gamble, and his or her ability to recover. Detailed analysis of the person's daily schedule and the nature and extent of available social supports is essential during this phase of treatment.

Viewing problem gambling as a biopsychosocial process recognizes the diversity of psychological factors involved in maintaining the behavior as well as the fact that problem gamblers are not a homogeneous group;[5] in fact, there appear to be a number of subtypes. This has major treatment implications. For instance, Griffiths outlined two very different types of gamblers.[6] The first type appeared to be addicted to gambling itself and played to test skill, gain social rewards, and, mostly, for excitement (i.e., the buzz or high). This was termed a "primary addiction" and appears to be a mixture of Moran's "subcultural" and "impulsive" types of gamblers.[10] Identifying the environmental, situational, or emotional factors that precede a gambling session would be the next stage in the intervention. The use of imaginal desensitization, counterconditioning, and situational exposure are methods that have been used to teach people to resist the urge to gamble. Of course, therapists differ in their view concerning the factors underlying this urge. Whereas some emphasize the learned or conditional quality of the behavior and emphasize the role of stimulus control, others may emphasize irrational beliefs or the person's desire to obtain physiological stimulation from the activity.

Furthermore, as emphasized by Griffiths, a second type of gambler may gamble for the reasons described earlier, such as escape.[6] These gamblers are usually depressed and socially isolated and could be described as having a secondary addiction in that the player uses gambling as an escape from a primary problem (e.g., broken home, relationship crisis). It seems that this type of "escape gambler" is common. This type appears to be a mixture of Moran's "neurotic" and "symptomatic" types.[10] If the primary problem is resolved by excessive gambling, then playing should disappear. This distinction obviously has clinical usefulness and may also help explain conflicting research, some of which states that gambling is a social activity and some of which states that it is a solitary activity. As discussed above, such gamblers are likely to benefit from any intervention that tries to find alternative activities that take the place of gambling. Like Griffiths, more recent writings by Blaszczynski and Nower suggest there are different subtypes of gamblers that follow different pathways.[76]

Conclusions

Examining gambling and problem gambling as a biopsychosocial behavior makes it evident that individual differences and broader contextual factors must be considered and not ignored.[5] This chapter provides evidence that a narrow focus upon one theoretical perspective in research and clinical interventions may, in many cases, not be justified. Such an approach fails to consider the

interrelationships between different levels of analysis. It would be of limited value to many gamblers whose problems have a different etiology, which may be multifaceted. As Gambino and Shaffer pointed out nearly three decades ago, individuals are self-determining agents; therefore, a taxonomy of situations must be developed to describe the vast majority of contexts and conditions in which people use substances or engage in habitual behaviors to alter their perceived experience.[77]

Gambino and Shaffer also make the important point that these behaviors are not completely self-developed or understood by the people themselves and should be examined more broadly. This is because gambling becomes a habitual behavior. Since the perceived experience of the individual can change over time, it is possible that focusing upon the self-reported factors currently maintaining the behavior does not provide insights into the factors that led to the behavior developing. Thus, when one takes a biopsychosocial view, it becomes possible to perceive individual gambling in terms of its broader social and cultural context. This approach also suggests that different perspectives and approaches may be beneficial, so long as they appear to apply to the particular gambler concerned. Moreover, it indicates that a variety of treatments could be beneficial if experienced simultaneously.

APPENDIX 1: THUMBNAIL SKETCHES OF PROBLEM GAMBLERS (ADAPTED FROM GRIFFITHS[6])

Gary

Gary is 19 years old. He experienced an unsettled early life and had been in care and in youth custody for offenses committed to feed his addiction to slot machines. His gambling manifested itself in other forms, such as horse racing, and the consequences were debilitating socially, financially, and emotionally. He regularly followed the same pattern of spending. He would receive a payment of £80 benefits, buy a large breakfast in the local cafe and a small amount of tobacco, and then proceed to spend the remainder on a slot machine in the cafe. He would always play until such a time as his money was gone regardless of whether he had won anything or not. Although he experienced a high when playing on the machines, he was unable to understand his behavior. In addition, he would normally exhibit bouts of aggressive behavior followed by a period of depression that would continue until the receipt of his next benefits payment. To survive the interim period, Gary would sell his possessions and borrow heavily from other people.

Brian

Brian is 17 years old. He comes from a stable background but is now serving an 18-month prison sentence for burglary offenses to fund his gambling addiction. He began playing slot machines from a very early age, and even at nine years of age he was stealing £10 at a time from his parents to play the machines. Brian was always being suspended from school for bad behavior and was eventually taken into voluntary care. His parents blame themselves particularly because they knew about his playing of the machines from an early age and never tried to stop him. Brian says he plays the machines because he gets a buzz from the lights, music, and possible jackpot. During an average playing session he will spend between £50 and £80. On one occasion he stole £140 and then spent it in the course of one afternoon. He claims he just cannot stop playing.

Dave

Dave is 19 years old and is serving a youth custody sentence for theft. He is the second eldest son in a family of five, and there is no history of gambling in his family. As a child he played slot machines at the seaside with money given to him by his parents. His problem became evident at 16 years of age with constant arrests for stealing to play the machines. To stop him playing the machines, Dave's parents escorted him to and from his place of work until they thought he was out of the habit. As soon as they stopped meeting him his gambling started again, and he was then taken to Gamblers Anonymous (GA) by his mother. Although he enjoyed GA, his gambling did not stop, and on one occasion when his parents refused to lend Dave some money to gamble, he took a tranquillizer overdose. The shock of the attempted suicide renewed the family's efforts to help him. He got a job in a cinema but the foyer housed a fruit machine and he was soon stealing from the till to play it. He has now served a number of custodial sentences, but the pattern is always the same after release. He gets his check, cashes, it and then goes and spends it all at once down at the arcade in about two hours.

Jeremy

Jeremy is 18 years old and is an only child. He has been gambling on slot machines since childhood. No one knew he had a problem until he burgled his school and was caught. His parents noticed he had changed from a happy go lucky lad to a bad-tempered monster but did not know why. He had started to develop a problem and as a consequence began to steal small amounts of

money from the home, used dinner money to play the machines, and began to be truant from school in order to go to the arcade. Over the years he repeatedly stole items from home—including various valuables and the television set. He is now serving a sentence for credit card fraud.

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Kleptomania

Jon Grant and Daniel Kim

THE HISTORY OF KLEPTOMANIA

Shoplifting appears to date back centuries. In fact, as long as there have been people selling merchandise, there have been people stealing it.[1,2] Although present for centuries, shoplifting seems to have become a serious problem in the 19th century with the rise of the department store (p. 4).[3] With easy access to a wide array of objects, there was an attendant increase in shoplifting. Newspapers in Europe and America ran daily articles about the rampant behavior of shoplifting.[2] When well-to-do middle-class women were caught stealing from department stores, however, the courts, the medical community, and society needed to explain this phenomenon.[2] It was from this context that the first scientific discussion of kleptomania emerged.

In 1816, Andre Matthey, a Swiss physician, used the word *klopemanie* (from the Greek words *kleptein* [to steal] and *mania* [insanity]) to describe the behavior of a distinct group of thieves that would impulsively or compulsively steal worthless or unneeded objects.[2,4] In 1838, two French physicians, Jean-Etienne Esquirol (Matthey's mentor) and C.C. Marc (Esquirol's pupil), changed the term to *kleptomanie* and included it among the *monomanias*, a group of disorders characterized by involuntary and irresistible actions that were mental diseases, not moral depravities (p. 183).[3] Thus, people suffering from kleptomania were seen as being forced to steal by this form of moral insanity (p. 184).[3]

Because most shoplifters appeared to be women, the discussion of kleptomania in the 19th and early 20th centuries became part of the ongoing medical debate about the relationship of insanity to the female reproductive system

(pp. 186–187).[3] Kleptomania was discussed alongside female pelvic disorders, hysteria, and other diseases of uterine organs. This inclusion of kleptomania within an ongoing medical discussion of gender is clearly seen in one of the first well-publicized cases of possible kleptomania in the British legal system at the end of the 19th century. In 1896, Mr. and Mrs. Walter Castle, two American citizens, were arrested in London for shoplifting. Given their socially prominent status, the *New York Times* and the *San Francisco Chronicle* covered the story with almost daily articles for the month of the trial. Mrs. Castle was described as suffering from a "diseased condition of the moral nature." One physician characterized Mrs. Castle's behavior as a "disorder of the mind" due to a "long-neglected uterine and rectal disease" (p. 186).[3] In fact, several physicians agreed that disordered menstruation, hemorrhoids, and uterine irregularities resulted in various forms of mania (including kleptomania) in women (p. 186).[3] Although various stolen items were found among Mr. Castle's personal belongings, he was exonerated from all responsibility. Premenstrual tension, menstrual disturbance, and postpartum conditions were all proposed as prominent factors in female shoplifting.

Although shoplifting has continued unabated since the 19th century, the labeling of certain shoplifters as kleptomaniacs largely disappeared by 1920.[2] This may have occurred for several reasons: first, no one in the scientific community was able to offer proof that female reproductive issues caused shoplifting; second, greater numbers of men were being apprehended for shoplifting;[1] third, many stores began using house detectives to embarrass and frighten middle-class women without pressing charges; and fourth, society became intolerant of what was perceived as an excuse for middle-class and wealthy women.[2] Although episodic mention is made of kleptomania in the scientific literature of the early 20th century, it would not generate concentrated scientific interest again until the early 1990s. In 1952, the first *Diagnostic and Statistical Manual of Mental Disorders (DSM–I)* included kleptomania as a supplementary term rather than as a distinct diagnosis, but kleptomania was then left out altogether in the *DSM–II* (1968). Since its reappearance in the *DSM–III* (1980), it has been categorized as an impulse control disorder not elsewhere classified and remains this way in the current *DSM–IV–TR* (2000).

WHAT IS KLEPTOMANIA? CLINICAL CHARACTERISTICS OF COMPULSIVE SHOPLIFTING

According to the *DSM–IV–TR*, a diagnosis of kleptomania requires the following: (1) recurrent failure to resist impulses to steal objects that are not needed for personal use or for their monetary value; (2) increasing sense of

tension immediately before committing the theft; (3) pleasure, gratification, or relief at the time of committing the theft; (4) stealing not committed to express anger or vengeance and not in response to a delusion or a hallucination; (5) stealing not better accounted for by conduct disorder, a manic episode, or antisocial personality disorder.[5] Furthermore, the objects stolen are usually of little value and affordable to the individual, who will then typically discard, hoard, secretly return, or give them away.[6] Individuals may avoid stealing when immediate arrest is likely, but the chances of apprehension are usually not fully taken into account. The impulse to steal is experienced as wrong, senseless, and incompatible with the individual's self-concept. Although a sense of pleasure, gratification, or relief is experienced at the time of the theft, individuals will describe a feeling of guilt, remorse, or depression soon afterwards.[7]

No national epidemiological study of kleptomania has been performed, but studies of kleptomania in various clinical samples suggest that the disorder is not uncommon. One study of depressed patients (n = 107) found that 4 (3.7%) suffered from kleptomania,[8] while a related study of patients with alcohol dependence (n = 79), found that 3 (3.8%) also reported symptoms consistent with kleptomania.[9] Studies of pathological gamblers have found rates of comorbid kleptomania ranging from 2.1 percent to 5 percent.[10,11] Interestingly, a study of bulimia patients found that 24 percent met *DSM–III–R* criteria for kleptomania.[12] A recent study of psychiatric inpatients with multiple disorders (n = 204) revealed that 7.8 percent (n = 16) endorsed current symptoms consistent with a diagnosis of kleptomania and 9.3 percent (n = 19) had a lifetime diagnosis of kleptomania.[13]

Of the four studies that have assembled large numbers of patients with kleptomania (n = 108), 68 (63.0%) were female.[4,14–16] Although the majority of reported cases of kleptomania indicate a female predominance, these findings may be biased, as women may be more likely than men to present for psychiatric evaluation. Also, the legal system may be more likely to send female shoplifters for psychiatric evaluation while sending male shoplifters to prison.[6]

The average age at onset of stealing behavior is typically during adolescence, although there are reports of new onset stealing behaviors occurring as early as 4 years of age[17] and as late as 77 years of age.[18] The mean age at time of evaluation is typically mid- to late thirties. Women usually present for evaluation at a younger age than men. For example, one study reported that the average age for women at time of evaluation was 35 years of age, while for men it was 50 years of age.[6] The length of time between age of onset and age at evaluation reinforces the guilt, shame, and secrecy involved in this disorder. The rates of marriage ranged from 35 percent[19] to 83 percent,[20] while university level education ranged from 19 percent[19] to 100 percent.[21] One study found that most of the patients were in the middle to lower economic brackets.[20]

According to *DSM–IV–TR*, three typical courses of this illness have been described: sporadic with brief episodes and long periods of remission; episodic with protracted periods of stealing and periods of remission; and chronic with some degree of fluctuation.[5] Most patients in the studies reported sudden onset with a chronic course.[16] A study of 22 kleptomaniacs revealed that they stole, on average, 2.3 times a week and had urges 3.7 days out of the week. Of those studied, 18.2 percent reported never having a day without symptoms and no one went longer than three weeks without stealing. Of those that were apprehended, 79 percent reported that urges to steal were virtually abolished, but only for an average of 3.5 days. Subjects reported that they stole mainly from stores (department, grocery, clothing, houseware), friends, relatives, and work. All stated they could afford what they stole but did not understand why they stole. Most reported that the value of stolen items increased over time and that most items were kept (or hoarded), although many were given away, returned, or discarded.[15] Examples of commonly stolen objects include sweets, newspapers, food, books, and clothes.[14]

ARE ALL SHOPLIFTERS KLEPTOMANIACS? A COMPARISON OF KLEPTOMANIA AND TYPICAL SHOPLIFTING

Kleptomaniacs differ from ordinary shoplifters in that they do not steal for personal gain but rather for symptomatic relief.[4] Apart from this, they may have many similarities, as the "profile of a typical shoplifter referred for psychiatric examination is a 37-year-old married female, employed at the professional end of the occupational spectrum, who is suffering from a depressive neurosis and who steals an item of insignificant value or use to herself."[22]

The exact prevalence of shoplifting is unknown (because many who steal are never caught), but one study found that 10 percent of randomly chosen customers followed while shopping were observed stealing.[23] In fact, it is estimated that more than $10 billion worth of goods are stolen from retailers each year, which translates into more than $25 million per day.[24] The vast majority of shoplifters are described as amateurs with sporadic activity, with no known history of criminal activity, and who steal for their own consumption rather than for resale.[25] One author has suggest that "the incidence of shoplifting is so widespread that one must give serious consideration to the possibility that it is a product of characteristics that are allied to or are part of the basic essence of human nature."[26] Studies involving apprehended, legally referred shoplifters indicate that shoplifting may be more common in women (ranging from 52 to 100%) than in men. But as with kleptomania, these rates may be falsely

elevated because women may be more likely to be referred for psychiatric evaluation than are men. Male shoplifters are more likely to be apprehended during adolescence and early adulthood, whereas women are more likely to be apprehended during puberty/early adulthood and around the age of menopause.[4] Some of these same studies also revealed that shoplifting was not related to lower socioeconomic level and that most stole for personal gain.[4] Rates of kleptomania among people who are arrested for shoplifting have ranged from 0 percent to 8 percent.[4] According to the *DSM–IV–TR*, fewer than 5 percent of shoplifters are identified as kleptomaniacs.[5] Again, these rates may be falsely low due to incomplete psychiatric evaluations, lack of strict diagnostic criteria for kleptomania, and selection bias in these samples.[4]

A study that compared kleptomaniacs to shoplifters interviewed directly after apprehension found that 58 percent of the shoplifters were male compared to only 32.4 percent of kleptomania patients.[27] The mean age among shoplifters was 27 years and among kleptomaniacs, 41 years. Although none of the shoplifters met *DSM* criteria for kleptomania, approximately one-fifth had not stolen for personal use and had eventually discarded the object.[27] The study also found that both groups reported the same degree of impulsivity and a feeling of not being oneself. On the other hand, kleptomaniacs reported a relatively greater number of previous thefts compared to shoplifters, which supports the compulsive aspect of kleptomania. The course of shoplifting is not exactly known, but it appears that it can be chronic, as there are reports of middle-aged and elderly persons who continue to steal. Overall, this study found that many shoplifters, although they do not meet criteria for kleptomania, share characteristics with kleptomaniacs and therefore may benefit from treatment.[27]

Given that both typical shoplifting and kleptomania may start at a relatively early age, it is important to briefly examine childhood and adolescent stealing. A young child generally has little, if any, concept of stealing—for him or her, desiring or wanting means possession of the object. By the age of 6 or 7, children begin to realize they are doing something wrong when they take something that doesn't belong to them.[28] Children may steal because they are unhappy, lonesome, jealous, fearful, or craving attention.[29] For older children and adolescents, stealing can be used to gain acceptance from a group, but is also a strong predictor of future delinquency and a marker for families lacking in warmth and personal stimulation. A strong attachment to parents decreases involvement in shoplifting.[30]

Overall, studies have shown that roughly 40 percent of apprehended shoplifters are adolescents. A study involving almost 1,700 adolescents found that 37 percent reported shoplifting at least once in the prior 12 months.[25] The percentage of respondents peaked around the 10th grade and then declined,

which is consistent with official crime statistics.[25] So why are so many adolescents stealing? The researchers hypothesized that this could be a function of immaturity during a stressful transition to adulthood, an inability to purchase certain items, and increased opportunity (the steepest gain of independence occurs around age 16 when most adolescents are allowed to drive and work).[25] On the other hand, the adolescents stated they shoplifted because of the novelty and risk involved, social reasons, and desire for the product. The majority of shoplifters in this study were male, which contrasts the popular view that shoplifting is a female crime but which supports U.S. government statistics that thievery is strongly male dominated during the teenage years.[25] Additionally, no relationship was found between family occupational status and adolescent shoplifting. How many of these adolescent shoplifters currently suffer from, or will develop a problem with kleptomania is not clear. Longitudinal studies of this nature are needed to help clinicians better assess who should receive treatment.

IS KLEPTOMANIA A SYMPTOM OF A LARGER PROBLEM?

The Relationship of Kleptomania to Other Psychiatric Ilnesses

Kleptomania has been classified as an impulse control disorder not elsewhere classified since its introduction to *DSM–III* in 1980. Other disorders included in this category include intermittent explosive disorder (discrete episodes of losing control of aggressive impulses), pyromania (recurrent, deliberate, and purposeful setting of fires), pathological gambling (persistent and recurrent maladaptive gambling that causes economic problems and significant social, personal, or occupational disturbances), and trichotillomania (recurrent pulling out of one's hair).[5] The essential feature of these disorders is the failure to resist an impulse, drive, or temptation to perform an act that is harmful to the person or to others. For most of these disorders, the individual feels an increasing sense of tension or arousal before committing the act and then experiences pleasure, gratification, or relief at the time of committing the act. Following the act there may or may not be regret, self-reproach, or guilt.

Symptoms may be one way of grouping disorders, but other ways include grouping by common etiologies and treatment. Some have proposed that kleptomania may be more appropriately placed among other disorders such as depression and obsessive-compulsive disorder (OCD). One way of examining this is to look at other illnesses that occur in patients with kleptomania (comorbidities), as well as illnesses in first-degree relatives of kleptomaniacs. High rates of comorbid psychiatric disorders have been found in patients with kleptomania. Rates of life-

time comorbid mood disorders have ranged from 59[15] to 100 percent[4] with lifetime comorbid bipolar disorder ranging from 9 percent[15] to 27[21] to 60 percent.[4] High lifetime rates of comorbid anxiety disorders (60%–80%),[4,30] impulse control disorders (20%–46%),[10] substance use disorders (23%–50%),[4,15] and eating disorders (60%)[4] have also been reported.

In terms of family history, 20–35 percent of first-degree relatives appear to suffer from mood disorders, while 15–20 percent suffer from substance use disorders.[16,31] One study has also found that obsessive-compulsive disorder may be elevated in first-degree relatives (25%),[16] but this finding has not been found consistently (7%).[31] And finally, one study found that although rates of individual psychiatric disorders in family members did not differ significantly between kleptomania patients and normal controls, patients with kleptomania were more likely to have a first-degree relative with a psychiatric disorder compared to normal controls.[32]

To explain these comorbidities and family histories, various suggestions have been proposed for kleptomania's classification. Some have suggested that kleptomania as well as a number of other disorders with impulsive features are related to either obsessive-compulsive disorder, forming an "obsessive-compulsive spectrum," or to mood disorders ("an affective spectrum disorder").[33] The grouping of impulse control disorders within either an obsessive-compulsive or an affective spectrum is based on symptom similarities, comorbidities, family history, and treatment responses. Like people who suffer from OCD, kleptomania patients report repetitive thoughts and behaviors and the high rates (63%) of hoarding.[15] Unlike OCD, however, the shoplifting of kleptomania is pleasurable and the behavior is often driven by cravings or urges. Given these descriptions, kleptomania may also share features of disorders characterized by impulsivity, such as bipolar disorder, substance use disorders, and attention deficit disorder.

Kleptomania has also been thought to be merely a symptom of an antisocial or borderline personality disorder. One study consisting of 28 individuals with kleptomania found that 10.7 percent met criteria for borderline personality disorder, while only 3.5 percent had antisocial personality disorder. Interestingly, the most frequently co-occurring disorder was paranoid personality disorder (17.9%) which is characterized by long-standing suspiciousness and mistrust of people. The results of this study suggested that kleptomania occurs independently of any particular personality disorder.[34] On the other hand, another study of 37 kleptomaniacs found that many displayed antisocial traits (not personality disorder), suggesting a lack of a clear boundary between kleptomaniacs and ordinary thieves.[14] Grant also found that kleptomaniacs have personality dimensions that are suggestive of borderline temperament, but this is not specific to kleptomania and there was not enough evidence to suggest kleptomania as a symptom of borderline personality disorder.[34]

Despite multiple suggestions as to where kleptomania should be classified, there is evidence to suggest that it should remain where it is. One study found that kleptomaniacs were no more likely than comparison subjects to endorse symptoms of depression, bipolar disorder, or OCD, but they did have a higher prevalence of impulse control disorders. The findings of this study support kleptomania in its current category of "impulse control disorders not elsewhere classified" and may suggest a common etiology among them.[32]

The Personal, Family, Social, and Economic Impacts of Kleptomania

One of the criteria for kleptomania is "pleasure, gratification, or relief at the time of committing the theft,"[5] How much pleasure and gratification does a kleptomaniac experience from this disorder? From various studies attempting to answer this question, it seems as though there is more suffering than pleasure or gratification. In a study of 22 kleptomaniacs, 100 percent reported trying unsuccessfully to stop stealing, and 100 percent had increased urges to steal when trying to stop.[15] Attempts to control urges to steal involved not leaving the house, shopping with friends and family, shopping when stores are busy, and thinking about getting caught. In addition, 64 percent reported being apprehended and 23 percent had been jailed. The vast majority (77.3%) experienced guilt and shame, with 27.3 percent reporting psychiatric hospitalization and 18.2 percent considering suicide because of their behavior. Only 41.7 percent told their spouses due to shame and guilt.[15]

A study of 40 kleptomaniacs revealed 77.5 percent had been arrested for shoplifting and 17.5 percent served jail time. Of those studied, 97.5 percent actively lied to loved ones about their behavior, and 47.5 percent felt this directly led to deterioration of these relationships. Among this group, 42.5 percent also reported significant work impairment through time wasted dealing with urges, guilt, and personal/legal consequences of behavior.[35] Those who suffer from kleptomania also report high levels of perceived stress (i.e., the degree to which people find their lives to be unpredictable, uncontrollable, and stressful), which appears to be associated with the severity of kleptomania symptoms.[36] Individuals with kleptomania also have significantly poorer life satisfaction compared to the general population, which may highlight the moral and legal repercussions of this disorder.[37]

Little is known about how much kleptomania contributes to economic losses, so most of the figures are extrapolated from shoplifting. The incidence of shoplifting has substantially increased in the past 40 years, partly because of the increase in supermarket and display merchandising.[38] Some suggest that

kleptomania is a consequence of consumerism and the abundance of commodities in modern society.[39] As previously mentioned, over $10 billion worth of goods are stolen from retailers each year (over $25 million a day) and there are 23 million shoplifters (or 1 in 11 people) in the United States. If the prevalence of kleptomania is 6 per 1,000 persons,[6] then there are approximately 1.2 million individuals with kleptomania (of the 200 million American adults) responsible for the loss of $500 million a year.[35] Shoplifting results in increased prices to cover anticipated losses, as well as delays and intrusions from locks, tags, and surveillance.[25]

"Tell Me about Your Childhood" . . . Proposed Psychodynamic Hypotheses

The past two centuries of kleptomania's history are littered with various theories and hypotheses that attempt to explain this baffling disorder but achieve no consensus on causation. The early to mid-1900s saw an increase in the popularity of psychodynamic and psychoanalytic theories of kleptomania, although many of these writings assumed that kleptomania and stealing had the same meanings and causes.[40] Kleptomania has been interpreted as a reflection of unconscious defenses against anxiety, forbidden instincts or wishes, unresolved conflicts, prohibited sexual drives, fear of castration, and sexual arousal, sexual gratification, and orgasm during the act of thievery.[41] The association of stealing and sexuality has appeared in various writings and has been described as being "an ungratified sexual instinct," as well as a forbidden secret such as masturbation.[42] This was reported in a case of a 57-year-old white female kleptomaniac who "claims that although frigid, afraid of sex, and never able to attain orgasm, she experienced her first orgasm when apprehended for the first time."[42] Symbolic meaning has also been attributed to the act of stealing, the stolen object, and the victim of the theft.[41] Stealing by a woman was viewed as symbolic of stealing a penis, while objects stolen represented anal fixation.[43] Cupchik felt thievery among upstanding citizens was an effort to obtain symbolic compensation for an actual or anticipated loss.[38] Some object relationists have seen stealing as a way of controlling a frightening and dangerous object by reinstating a sense of omnipotence, while some self psychologists have interpreted stealing as a way to prevent fragmentation of the self and as a response to narcissistic injury.[6] There has also been focus on kleptomania's relationship with anxiety and depression. The act of stealing has been interpreted as a risk-taking behavior performed by a depressed subject with an antidepressant significance, as a symptom of stress, or as a way of relief from stressful conditions.[44] In children who report feeling injured or neglected, kleptomania may gratify two needs: the actions themselves

may be gratifying and the stolen objects might dispel feelings of deprivation.[43] Analogously, some reported that the need for stimulation results in artificial methods (such as shoplifting) to increase psychological tension. There are no data, however, to confirm or refute any of these theories.[6]

WHAT ABOUT BRAIN CHEMISTRY? PROPOSED NEUROBIOLOGICAL HYPOTHESES OF KLEPTOMANIA

Multiple case reports discuss neurological and medical conditions as well as medications that have induced kleptomania-like behavior, but the findings of these studies should be interpreted with caution, as they may or may not have direct relevance to kleptomania occurring in the absence of these factors. Thomas Nyffeler described a 32-year-old male with a brain tumor (craniopharyngioma with right-sided extension) who developed kleptomania symptoms within weeks after surgery. These findings suggest that disruption of specific neuronal pathways in the brain (especially of the prefrontal cortex) could result in impairments of response suppression and development of disorders of the compulsive-addictive spectrum. Furthermore, compulsive-addictive behaviors may be more common after right-sided brain damage than after left-sided brain damage.[45]

Anat Aizer described two cases of head trauma resulting in new onset kleptomania-like symptoms.[46] A 43-year-old male with blunt trauma to the front/side (frontotemporal region) of the head resulted in 5–10 minutes of unconsciousness and normal neurological imaging and examination. Soon afterwards he developed personality changes and kleptomania-like symptoms, which remitted with citalopram (antidepressant) and therapy. Although brain imaging showed no abnormalities, it was hypothesized that damage to this patient's frontal lobe resulted in his clinical condition, as lesions to this region commonly induce personality changes and are associated with poor planning and faulty decision making. The second case involved a 34-year-old male who fell from first-floor level, resulting in a three-day coma. Imaging revealed a bruise on the left side of the brain (left temporal lobe). Soon afterwards he began to develop kleptomania-like symptoms, which fully remitted with venlafaxine (antidepressant) and naltrexone (medication for opiate addiction and other addictive behaviors).

The underlying biological mechanism of urge-based disorders may involve the processing of incoming reward inputs by the ventral tegmental area-nucleus accumbens-orbital frontal cortex (VTA-NA-OFC) circuit.[47,48] This circuit influences behavior by modulating animal and human motivation (e.g., urges, cravings). Dopamine may also play a major role in the regulation of this region's

functioning.[49] One hypothesis is that differences in these regions may result in craving behavior seen in kleptomania and other impulse control disorders. The efficacy of naltrexone (see below) lends further support to this hypothesis. Naltrexone is a medication that is used to treat opiate and alcohol addiction and is thought to modulate dopamine neurons in this area.[50]

Because serotonergic systems have been implicated in impaired impulse regulation, serotonin dysregulation may also be a clue to the pathophysiology of kleptomania (as well as other impulse control disorders). Given the evidence of serotonin dysregulation in trichotillomania, pathological gambling, and other obsessive-compulsive spectrum disorders, pharmacologic intervention for kleptomania has focused on the use of selective serotonin reuptake inhibitors (SSRIs).[51] The use of SSRIs is based on the hypothesis that the etiology of these disorders stems from low levels of serotonin in brain synapses.[41] On the other hand, there are reported cases of kleptomania emerging during treatment of depression with SSRIs. Three cases involve a 54-year-old female, 45-year-old male, and 65-year-old male with new onset of kleptomania-like symptoms during treatment of depression with SSRIs such as fluvoxamine and fluoxetine. It is not entirely clear what the causative agent in each case was or if these patients represent a particular subgroup.[52]

WHAT CAN BE DONE ABOUT KLEPTOMANIA?
A MULTIDISCIPLINARY APPROACH TO TREATMENT

At this time, the available treatments for kleptomania offered by mental health professionals include various forms of psychotherapy and pharmacotherapy, but studies exploring the efficacy of these treatments are extremely limited. The majority of findings are based on case reports, small case series, and small numbers of individuals with kleptomania who have been willing to participate in research studies. Treatments are typically selected on a case-by-case basis and involve patient preference and appropriateness to the respective modality. Typically a patient will either take medications alone or take medications in conjunction with therapy. One study found that 68 percent sought medication treatment, but 0 percent told their physician about kleptomania symptoms. Instead, these patients presented with symptoms of anxiety and depression. Furthermore, no treating physician screened for kleptomania symptoms.[15]

As discussed in an earlier section, psychoanalytic and psychodynamic theories were used to try to understand kleptomania, and thus psychoanalytic and psychodynamic psychotherapy were the treatment of choice for many decades.[41] The efficacy of this treatment modality, however, is unknown due to lack of controlled studies. Case reports reveal that some patients responded

well to this type of therapy, sometimes in conjunction with medications, while others showed no improvement despite years of therapy.[41] No improvements in kleptomania symptoms were reported in a group of 11 patients (out of 20) undergoing psychodynamic psychotherapy.[4]

With regards to therapy, cognitive-behavioral therapy (CBT) has largely replaced psychoanalytic and psychodynamic psychotherapies in the treatment of kleptomania. Several strategies used in kleptomania include the following: covert sensitization (i.e., the patient is instructed to imagine herself stealing and then to imagine a negative outcome such as being caught or feeling nauseous or short of breath), aversion therapy (i.e., aversive breath holding until mildly painful whenever an urge to steal or an image of it is experienced), and systematic desensitization (i.e., helping the patient achieve a relaxed state through progressive muscle relaxation and asking the patient to imagine the different steps of the stealing episode, meanwhile suggesting that he or she could better control the urge to steal by controlling the anxiety).[51] CBT suffers from a lack of controlled studies, but case reports reveal that some patients respond well to this, especially in conjunction with medication. One case described a 77-year-old female with onset of kleptomania at age 73 who responded well to covert sensitization, in conjunction with medication and a self-imposed ban on shopping.[18] Another case described a 43-year-old male with new onset kleptomania and personality changes after head trauma and loss of consciousness during an automobile accident. He achieved full remission with citalopram 40mg/d and CBT.[46] One case study reported a 39-year-old male with kleptomania who responded well to CBT (including covert sensitization).[53]

Typically medications are used in conjunction with therapy (CBT or psychodynamic/psychoanalytic psychotherapy). Currently there are no medications approved by the Food and Drug Administration to treat kleptomania. As with the therapies, current knowledge about the pharmacotherapy of kleptomania is based on case reports, case series, and an open-label studies and is also guided by etiological and neurobiological hypotheses.

Selective serotonin reuptake inhibitors (SSRIs) are medications commonly used to treat depression and a variety of anxiety disorders including obsessive-compulsive disorder and panic disorder. One case series reported that 2 patients achieved remission of kleptomania with fluoxetine while 7 did not.[4] A combination of fluoxetine 40mg/d and lithium 600mg/d resulted in minimal or no chronic urges to steal in a 40-year-old female.[54] A case series of 5 patients reported success with fluoxetine up to 40mg/d (4 patients) and paroxetine up to 20mg/d (1 patient).[55] An 11-year-old girl with kleptomania and attention deficit hyperactivity disorder achieved symptom remission with sertraline and methylphenidate (stimulant).[56] A 38-year-old Chinese male with kleptomania

and OCD was successfully treated with fluvoxamine 300mg/d.[57] A 29-year-old male with kleptomania achieved almost complete symptom remission with paroxetine 30mg/d.[58] A 48-year-old female with kleptomania and premenstrual dysphoric disorder (PMDD) experienced marked intensification of kleptomania prior to menses. Symptoms from both disorders abated with escitalopram 10mg/d.[59] As discussed in a prior section, the emergence of new onset kleptomania during use of SSRIs for depression was reported in 3 patients.

Other non-SSRI antidepressants that have been used to treat kleptomania include trazodone, imipramine, desipramine, and monoamine oxidase inhibitors (MAO-Is). A 23-year-old female with bulimia nervosa and kleptomania experienced remission of bulimic symptoms with tranylcypromine 60mg/d (an MAO-I) and remission of kleptomania with trazodone 300mg/d, whereas a 19-year-old female with bulimia, depression, and kleptomania experienced no symptom relief with trazodone 400mg/d. Instead, a trial of fluoxetine 80mg/d achieved virtual remission of depression and kleptomania and 80% reduction of bulimia.[4] Imipramine alone (3 cases) and desipramine alone (1 case) were not found effective, but nortriptyline achieved remission in 1 patient. Imipramine in combination with fluoxetine was beneficial for another patient.[41] Overall, findings do not support use of MAO-Is, which were ineffective for 5 patients except for 1 (who was also on trazodone).[4]

Mood stabilizers, including lithium, valproic acid, carbamazepine, topiramate, and lamotrigine, have been used "off label" to treat kleptomania. Lithium with fluoxetine achieved a substantial decrease in stealing urges in a 40-year-old female.[54] Of 4 trials where lithium was administered alone, only 1 patient experienced good remission.[41] A 37-year-old female with bipolar disorder and kleptomania achieved full remission of kleptomania and manageable mood swings with valproic acid 2,000 mg/d.[60] Carbamazepine with clomipramine failed to improve kleptomania symptoms.[41] Topiramate has been used successfully either alone or in conjunction with an SSRI.[61]

Naltrexone is classified as an opioid receptor antagonist and is used to curb urges in opiate and alcohol addiction. In addition, naltrexone has shown some promise in the treatment for kleptomania, based on case reports and an open-label study. In an outcome study of 17 patients with kleptomania treated with naltrexone for up to three years, 76.5 percent reported reduction in urges to steal, 41.1 percent reported no stealing behavior, and 52.9 percent were rated "not ill at all" or having "very mild" kleptomania symptoms.[62] Another study conducted by Grant involving 10 kleptomaniacs on naltrexone showed that 20 percent reported complete remission, while 80 percent reported significant reduction in urges.[50] Three additional case reports revealed complete remission of kleptomania on naltrexone 50–150 mg/d.[63–65]

Other medications that have been used include benzodiazepines (sedatives), including clonazepam and alprazolam (in conjunction with other treatment modalities), which are especially effective in tension relief.[41] There are some reports of electroconvulsive therapy (ECT) being used to treat kleptomania, but typically in the presence of depressive symptoms as well. Three case reports revealed ECT being effective for depressive and possibly for kleptomania symptoms.[4] ECT should probably be used only for patients who suffer from co-occurring depression.[41]

Despite the increasing use of medications to treat kleptomania, perhaps a self-imposed ban on shopping by the patient is still the most common method of treatment. This way people suffering from kleptomania can impose such treatment without having to seek help.[6] But with increasing understanding awareness, and education about this illness, perhaps fewer people will have to suffer in shame and secrecy, as we are finding that kleptomania is a potentially treatable illness.

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Mood Disorders in Children and Adolescents

Jarrod M. Leffler and Mary A. Fristad

Mood disorders occur in approximately 5 percent of children and adolescents at any point in time. Awareness of mood disorders among the general public is increasing, as evidenced by an explosion of magazine and newspaper stories, television features, popular press books, and Web sites coving the topic as well as television and print article advertisements for pharmacologic interventions. However, there are many controversies in the field, over both how to diagnose depression and bipolar disorder in youth and how to treat these conditions once they are recognized. In this chapter, we briefly reflect on contemporary portrayals of mood disorders in the media, then we present clinical vignettes representative of mood disorders in children and adolescents. Next, we outline a history of diagnosing and treating depressive and bipolar disorders in youth, ending with an overview of current diagnostic controversies. Then we review how to assess depression and mania in youth, providing developmentally appropriate examples of how symptoms appear in youth and discussing possible differential diagnoses. We summarize what is known about biological treatments (e.g., pharmacotherapy, light therapy, and electroconvulsive therapy) and psychotherapy treatments for depressive and bipolar disorders in youth, and we discuss current treatment issues in the news (e.g., antidepressants linked to increased suicidality in youth). Finally, we conclude with a summary of resources families can use to educate themselves about mood disorders.

IN THE MEDIA

You are likely, at some point in your life, to meet or know someone with depression or bipolar disorder. Additionally, you are increasingly likely to hear

mood disorders described as relatively common conditions afflicting celebrities and other public figures. The *New York Times* recently published an article titled "Hypomanic? Absolutely. But Oh So Productive!"[1] This article not only brought bipolar disorder to the nation's attention by being published in one of the largest print media sources in the world, but it joined numerous other professional, scientific, and lay publications in the discussion of bipolar disorder (see Resources).[2,3] There have also been books written for children in an attempt to help them better understand the illness (see Resources).

A recent Google Internet search identified 517,000 sites for "childhood mood disorders" and 577,000 for "adolescent mood disorders." Numbers for more specific searches were similarly high. The search phrase "childhood depression" resulted in 3,100,000 identified sites, while "childhood bipolar disorder" and "childhood mania" resulted in 483,000 and 248,000 sites, respectively. Similarly, when searching for "adolescent depression," 3,630,000 sites were found, while the terms "adolescent bipolar disorder" and "adolescent mania" resulted in 757,000 and 645,000 sites, respectively. The public's attention also has been raised regarding mental illness via new government-sponsored implementation of national screening days for depression and anxiety.

Although mood disorders can be quite debilitating, some individuals who have suffered from them have been highly successful in their professional lives. A partial list of famous persons who have battled mood disorders includes John Quincy Adams (former U.S. president); Buzz Aldrin (astronaut); Ludwig van Beethoven (composer); Ray Charles (musician); Winston Churchill (former British prime minister); Kurt Cobain (musician); Rodney Dangerfield (comedian); F. Scott Fitzgerald (writer); Ernest Hemingway (writer); Audrey Hepburn (actress); Abraham Lincoln (former U.S. president): Georgia O'Keeffe (painter); Sylvia Plath (poet); and Boris Yeltsin (former Russian president). Given the frequency with which adults with mood disorders report their onset in childhood and adolescence,[4] it is important to understand the history of recognizing mood disorders in youth.

CLINICAL VIGNETTES *

Samuel

Upon meeting with Samuel, a 10-year-old male, he reported becoming easily irritated and annoyed by his friends and family members, and he has had homicidal thoughts about these individuals. When irritated, Samuel often slammed doors,

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* In the vignettes, all names have been changed and identifying information concealed to protect the privacy of the individuals.

destroyed property, and yelled excessively. Samuel also reported that he experienced suicidal ideation, and he had a significant history of engaging in self-harming behaviors by cutting himself with a knife. Samuel reported ongoing negative views about his social and physical abilities, significant discomfort from daily stomachaches, and frequent periods of tearfulness. Samuel's mother, Mrs. Jones, reported that Samuel displayed a loss of energy and appeared unmotivated. Additionally, Samuel experienced difficulty falling asleep for two to three hours almost every night and experienced waking up in the middle of the night once or twice a week. Given the number, duration, frequency, and severity of his symptoms, Samuel was diagnosed with and treated for major depressive disorder (MDD).

Amy

Amy, a 15-year-old female, abruptly began to display significant hypersexual behaviors. For example, she frequently attempted to kiss her mother with an open mouth while sticking out her tongue; opened her mother's blouse, exposing her chest; touched the genital areas of male and female peers at school; and against her parents' wishes wore provocative and revealing clothing that was often too small for her. Around the same time, Amy began to laugh without provocation, and when she tried to talk, her speech was sometimes so rapid that she stuttered. Additionally, her laughter and giggling interfered with what she was saying. When she did speak, others had difficulty following her line of thought. Amy began to sleep two to four hours a night, waking with a high level of energy. She described her mood as "very excited all the time." After a week of this unusual behavior, Amy became very sad and tearful, and she yelled at her family to "Just leave me alone." She began to sleep 12–14 hours a day and still would fall asleep in class. Her grades began to suffer and she complained school was boring. Upon repeated questioning, both she and her mother denied she had ever been sexually abused or exposed to inappropriate sexual content (e.g., X-rated movies, pornography). Because of the frequency, intensity, number, and duration of her symptoms, Amy was diagnosed with and treated for bipolar I disorder.

HISTORY OF DIAGNOSING MOOD DISORDERS

Depression

We have learned much about youth mood disorders in the past two decades. Prior to the 1980s, many mental health professionals believed that children, due to their underdeveloped psyches, were unable to experience affective disturbances. According to psychodynamic theory, the immature superego and

lack of stable self-concept in childhood prevented depression from occurring in this age group.[5]

Others postulated that depression could not exist in children because the behaviors described as features of the illness are transiently prevalent in all children and can therefore not be described as deviant.[6] However, further work has validated the presence of depression in children.[7] Epidemiological studies suggest the prevalence rate of child and adolescent depressive disorders ranges from 1.6 to 8.9 percent.[8] Rates of depression for preschoolers have been reported to range between 1 and 4 percent.[9] In youth aged 9 to 17 rates of 5 percent have been reported.[8] Prevalence rates in the general population of clinically significant depression have been found between 0.4 and 2.5 percent and 0.4 and 8.3 percent for children and adolescents, respectively, with lifetime rates of depression in school-age children at about 3 percent.[8] Lifetime prevalence rates of major depression in adolescents are reported to be between 9 and 14 percent.[10] Prevalence rates of dysthymic disorder range from 0.6 to 1.7 percent for children and 1.6 to 8.0 percent for adolescents.[10]

Bipolar Disorder

In the 1920s, Emil Kraepelin discussed the clinical presentation of manic depression, an illness that presented with the switching between elevated and depressed emotions, cognitions, and behaviors. These symptoms consisted of flight of ideas, elevated and expansive mood, pressured speech, depressed mood, and cognitive stupor.[11] Others more specifically reported cases of manic depression in children and adolescents.[12,13] Within the past decade, bipolar disorder in youth has received increased public and professional interest.[14,15] Research has found lifetime prevalence rates for bipolar disorder to be about 1 percent with an additional 5.7 percent reporting subthreshold symptoms quite possibly related to bipolar II disorder or cyclothymia.[16] Sixty percent of adults diagnosed with bipolar disorder retrospectively reported onset of the illness in childhood or adolescence.[4] A perceived increase in childhood bipolar disorder can be related to the increased knowledge professionals and the public have about the disorder. Additionally, increased media coverage in the past decade has added to the public's awareness and outcry regarding the illness. Other possible reasons childhood bipolar disorder is diagnosed more frequently include (1) an increasing number of children at a younger age being prescribed psychotropic medications that may exacerbate manic symptoms and episodes and (2) the successful treatment of many adults who then go on to have families of their own and ultimately have children with similar mood disorders. These topics are discussed in more detail later in the chapter.

CURRENT DIAGNOSTIC CONVENTIONS

Youth depressive and bipolar disorders can have a chronic and morbid course with significant costs to individuals, families, peers, and society due to suicidality, dropping out of school, health care costs (i.e., medical and psychiatric), teen/early pregnancies, substance use, and legal issues.[16] Diagnosis for these illnesses is based on the criteria set forth by the American Psychiatric Association (APA) and described in the fourth edition, text revision, of the *Diagnostic and Statistical Manual of Mental Disorders (DSM–IV–TR)*.[17]

Depression

A mental or medical health care provider (i.e., a medical doctor, psychologist, social worker, or counselor) who applies the guidelines set forth in the *DSM–IV–TR* can make the diagnosis of major depressive disorder (MDD), dysthymia, or depressive disorder-not otherwise specified (NOS). Criteria to diagnose depressive disorders in youth are the same as for adults and include the presence of depressed mood or irritable mood and/or loss of pleasure for at least two weeks, a decline from previous functioning, significant distress or impairment in areas of functioning, and four additional symptoms from the following list: significantly increased or decreased appetite; sleeping too much or too little; too much or too little energy; fatigue; feelings of worthlessness and guilt; decreased ability to concentrate; and morbid or suicidal ideation or attempt.[17] Dysthymic disorder is more chronic and persistent than MDD. Dysthymia requires depressed or irritable mood for one year (two years in adults), with at least two symptoms similar to those of MDD. Additionally, medical illnesses should be ruled out as a reason for symptoms being present (e.g., thyroid difficulties can cause changes in energy levels, eating, and sleeping patterns). Depressive disorder-NOS is diagnosed when an individual experiences symptoms of MDD or dysthymia but the severity, intensity, and number or frequency of symptoms fall short of meeting the diagnostic criteria of MDD or dysthymia.[17]

During childhood, boys and girls experience similar rates of depression. However, gender differences emerge by ages 12 to 13.[18] The onset of MDD is more likely to occur between the ages of 11 and 14, with dysthymia occurring even earlier.[19] Currently, we know little about ethnic and cultural differences in rates of youth depression. Youth of parents with mood disorders have a higher chance of developing mood disorders than youth of non-mood-impaired parents.[20]

Bipolar Disorder

There are various types of bipolar disorders based on the types and severity of moods experienced. Their cardinal feature is mania. In bipolar I disorder, mania presents as a distinct period of excessively elevated, expansive, or irritable mood persisting for at least one week. In bipolar II disorder, the level of elevated mood is less, or hypomanic, and usually only lasts four days. In bipolar I and bipolar II, three or more of the following symptoms accompany the elevated mood (four symptoms if the mood change is irritability): increased self-esteem; decreased need for sleep; increased amount or pace of speech; distractibility; racing thoughts; increased goal-directed behavior; and over-involvement in pleasurable activities.[17] Mania may alternate or co-occur with depression. In cyclothymia, multiple periods of hypomania and mini-depressions occur without a break for more than two months at any one time. Bipolar disorder-not otherwise specified (BP-NOS) refers to manic and depressive symptoms that do not meet criteria for any other bipolar disorder. For example, youth whose symptoms are intense but brief (lasting two to three days at a time two to three times a month) or whose symptoms are low in number would receive the diagnosis of BP-NOS. Another diagnosis to consider is mood disorder due to a general medical condition. This diagnosis requires that a significantly prominent mood disturbance, either depressed or elevated, is present as the result of a medical condition (e.g., hypothyroid condition, brain tumor, seizure disorder).

Bipolar disorder that starts in childhood differs in several ways from bipolar disorder in adults. Adults often experience longer mood cycles than youth.[21] Additionally, youth are more likely to experience rapid cycling or mixed episodes (manic and depressive symptoms occurring at the same time).[22]

Family history is associated with increased risk for bipolar disorder.[23] The rates of mood disorders in youth of parents with bipolar disorder range from 5 percent to 67 percent whereas 0 percent to 38 percent of youth born of parents without bipolar disorder developed mood disorders.[23] Rates of other psychological disorders range from 5 percent to 52 percent for youth with parents diagnosed with bipolar disorder and from 0 percent to 25 percent for youth of parents without bipolar disorder.[23]

Many adolescents with major depression (6% to 49%) develop manic symptoms.[24] Risk factors for "switching" from depression to mania include hypersomnolence, psychotic symptoms, early age of onset, and family history of bipolar disorder.[25] Youth with bipolar disorder are at high risk for suicidality.[16]

DIAGNOSTIC ISSUES

In the process of determining whether a mood disorder exists, two key concerns must be addressed. They are differential diagnosis, meaning there are

other possible disorders that may better account for the youth's disturbance, and comorbidity, meaning that more than one disorder is present at the same time. Both are reviewed below.

Differential Diagnosis

Accurate diagnosis, which directs appropriate psychopharmacology, psychotherapy, and other necessary services, is difficult, and if not done correctly it can lead to negative outcomes. For instance, if a youth has mania but is misdiagnosed with attention deficit hyperactivity disorder (ADHD) and prescribed a stimulant, this medication could trigger a manic or psychotic episode. Additionally, if the youth was medicated for a depressive episode but actually had bipolar disorder, the antidepressant could trigger a manic episode.

Disorders that are sometimes confused with mood disorders include ADHD, anxiety, schizophrenia, oppositional defiant disorder, conduct disorder, post-traumatic stress disorder, and others to be discussed in this section. Although many childhood psychiatric disorders share similar symptoms and symptoms of mania and depression are present in other psychiatric disorders, the collection of symptoms and their frequency, intensity, number, and duration as well as the level of impairment and disruption they cause the individual and those around him or her assist in identifying the most accurate explanation of distress.

Depression

Conditions that may mimic depression include bereavement, adjustment disorder with depressed mood, anorexia nervosa, ADHD, anxiety disorders, somatization disorder, and possibly schizophrenia, if psychotic symptoms are present. Bereavement is in response to the death of a loved one (e.g., a family member, friend, or pet). Usually the individual's sad mood does not last beyond two months, and if it does, a diagnosis of MDD might be considered. Additionally, bereavement does not include symptoms such as excessive guilt about the event, suicidal ideation, excessive feelings of worthlessness, chronic and significant deficits in functioning, or hallucinations.[17] Adjustment disorders are the result of a stressor; they begin within three months of the event, dissipate within six months, and do not meet diagnostic criteria for MDD.

Anorexia nervosa shares with MDD the symptoms of weight loss, worthlessness, guilt, and decreased self-esteem. However, weight loss in anorexia is driven by a fear of being fat, whereas weight loss in MDD is due to a loss of appetite. Weight loss, guilt, and decreased self-esteem in anorexia are related to body image distortions, whereas in depression these symptoms tend to be more

global. Because lack of nutrition can produce symptoms of fatigue and cognitive slowing in anorexia, weight stabilization is necessary before clearly determining what other symptoms are present. Additionally, a youth who continues to lose weight while on a calorie-enhanced program and being monitored by a physician or dietician is more likely experiencing an eating disorder or other medical condition rather than MDD.

Attention problems and restlessness are hallmark features of ADHD. For these disturbances to "count" as symptoms of depression, they need to change markedly from their baseline for the youth. While anxiety and mood disorders share several symptoms (e.g., restlessness, irritability, difficulty concentrating, sleep disturbance, fatigue), MDD requires loss of pleasure or dysphoric mood as a cardinal symptom. Somatization disorder requires physical pain, which is not a required symptom of MDD, and the severity of physical complaints exceeds that typically experienced by individuals suffering from MDD. Finally, while psychosis is a central feature of schizophrenia, it can also occur when MDD is severe. In the case of MDD with psychotic features, the psychosis resolves as the mood disorder improves. This is not true in schizophrenia.

Bipolar Disorder

Some possible differential diagnoses for bipolar disorder in youth include conduct disorder, ADHD, schizophrenia, schizoaffective disorder, intermittent explosive disorder, and post-traumatic stress disorder.

Youth with both conduct disorder and mania can appear surly and irritable, and on the surface their diagnoses can be difficult to differentiate. However, the level of irritability that a youth with bipolar disorder displays can become significantly more violent with less provocation. Further, the progression of conduct disorder is more prolonged. One can also differentiate mania form conduct disorder by noting that the former but not the latter includes flight of ideas, rapid speech, sleep disturbance, altered mood states, grandiosity, and may include psychotic features.

Mania and ADHD share similar symptoms including excessive energy, quick speech, irritability, distractibility, and lack of forethought in planning. However, when youth with bipolar disorder display an increase in behavior levels, they demonstrate an increase in goal-directed behavior whereas youth with ADHD do not.[26] Further, although youth with ADHD may become irritable, youth with bipolar disorder display mood cycles that include elation, depression, and irritability. Clinicians can distinguish more readily between ADHD and mania by identifying the duration, frequency, and intensity of elation, grandiosity, racing thoughts, hypersexuality, and decreased need for sleep.[26]

Bipolar disorder in youth may be inappropriately identified as schizophrenia. Therefore, schizophrenia should be considered as a differential diagnosis, especially in late-teens.[27] This may occur because manic symptoms can mimic psychosis due to rapid and tangential speech, flight of ideas, auditory and visual hallucinations, and paranoia.[26] However, individuals with schizophrenia may present as socially withdrawn and display more bizarre behaviors. Further, the course of developing schizophrenia is more disturbed and chronic compared to an acute onset in mania. Also, the presentation of prior depressive episodes may distinguish bipolar disorder from schizophrenia. Schizoaffective disorder and bipolar disorder both require the occurrence of a depressive, manic, or mixed mood episode. However, schizoaffective disorder also requires the presentation of two of the following: hallucinations; delusions; disorganized language and thought process; severely disturbed behavior; and symptoms suggestive of a loss of normal functioning (i.e., decrease in goal-directed behavior, loss of emotional range, and poverty or decline in thought and speech).

While intermittent explosive disorder carries with it severe episodes of aggressive behaviors, it lacks the inclusion of manic and depressive mood states, sleep disturbances, and thought and speech disturbances. Adjustment disorder with mixed disturbance of emotion and conduct requires the identification of a stressor within the past three months that prompted an emotional and behavioral response in excess of what would be expected. Post-traumatic stress disorder involves experiencing, witnessing, or being confronted with a physically or emotionally threatening event that invoked feelings of fear, helplessness, or horror. The individual may then experience a decrease in sleep, hyperarousal, rapid speech, and irritability. However, these symptoms differ from those of bipolar in that there usually is not the presence of elevated and silly mood, increase in goal-directed behavior, and grandiosity. Additionally, experiencing a life-threatening event is not usually a precipitant to bipolar disorder.

Medical illness should also be considered in the different diagnosis. Medical problems that may mimic or cause symptoms of mania include encephalitis, multiple sclerosis, Wilson's disease, acquired immune deficiency states, hyperthyroidism, seizures, complications in autoimmune disorders, right-sided cerebrovascular accident, closed and open head injuries, and brain tumors.[28] Medications such as corticosteroids, which are used to reduce various types of inflammation related to illnesses (e.g., asthma, inflammatory bowel disease), aminophyline, pseudoephedrine, and antibiotics such as clarithromycin, erythromycin, and amoxicillin may incite episodes of mania.[28] As previously mentioned, stimulant and antidepressant medications may elicit symptoms of mania. Additionally, illicit substances such as marijuana, cocaine, and Ecstasy can contribute to elevated moods.

Comorbidity

Depression

Comorbidity is common in youth with MDD.[10] The most likely disorder to co-occur with MDD is anxiety. Between 18 and 75 percent of youth with depressive disorders also have one or more anxiety disorders.[29,30] Other comorbid disorders include conduct disorder, 33 percent; oppositional defiant disorder, 13 percent in children and 7 percent in adolescents, but rates as high as 50 percent have been found as well; ADHD, 15 percent in children and 6 percent in adolescents; substance use disorders, 1 percent in children and 11 percent in adolescents; and eating disorders.[10,29,30]

Bipolar Disorder

Similarly, comorbidity is high in youth with bipolar disorder, with a majority of youth with bipolar I and II disorders meeting diagnostic criteria for at least one other psychiatric disorder.[31] Some of the more common disorders include oppositional defiant disorder, 47 to 79 percent; conduct disorder, 12 to 17 percent; ADHD, 63 to 87 percent; anxiety disorders, 14 to 23 percent; and substance abuse in adolescents, 18 percent.[22,31]

TREATMENT

This section reviews various types of biological and psychotherapeutic interventions used to treat mood disorders. Some are less conventional but have been found to be effective (e.g., light therapy and electroconvulsive treatment), whereas others are more traditional and familiar to professionals and lay persons (e.g., medications and talk therapy).

Biological Treatments

Biological treatments include different types of interventions (e.g., oral or external) that in some way, once delivered to the individual, alter physiological events in the body. These events include increasing or decreasing chemicals in the brain by sending signals to certain parts of the brain or by delivering specific chemicals to targeted locations in the brain.

Pharmacotherapy

Pharmacotherapy (i.e., medication) is a common treatment component for mood disorders. While we know a considerable amount about pharmacotherapy in adults with mood disorders, our knowledge of youth psychopharmacology is,

unfortunately, scanty. Psychotropic medications have been found to help reduce mood symptoms in adults. More specifically, antidepressants such as Prozac, Celexa, Zoloft, and Paxil have been found to improve depressive mood states, while mood stabilizers such as lithium, Lamictal, and Depakote[32] and atypical antipsychotics such as Zyprexa, Seroquel, Risperdal, Geodon, and Abilify[33] have successfully managed elevated mood and disruptive behaviors related to bipolar disorder. This success has prompted controlled medication trials with youth, and some studies have found similar success. For example, some antidepressant medications have been found to effectively treat depressive symptoms in youth, and some mood stabilizers have been found to successfully treat manic episodes. Other studies have found that antidepressants for youth are no more effective than placebo treatments.[34] While there are no controlled studies in youth evaluating the effectiveness of atypical antipsychotic medications, case studies have demonstrated their positive impact on managing manic episodes and related symptoms.[28] In summary, many more studies are needed to thoroughly understand the potential risks and benefits of medications for mood disorders in children and adolescents.

Trends in prescribing psychotropic medications to youth have fluctuated. More specifically, rates of prescriptions for these classes of medications in youth have increased dramatically in the past decade.[35] Between 1994 and 2003, prescriptions for selective serotonin reuptake inhibitors (SSRIs), a type of antidepressant, more than tripled from 4.6 per 1,000 to 14.5 per 1,000 children ages 5 to 17 years old, whereas prescriptions for tricyclic antidepressants decreased from 6.5 per 1,000 to 1.3 per 1,000.[35] During this time period there was no change in the prescription of lithium. However, anticonvulsants had a twofold increase from 3.5 per 1,000 to 6.9 per 1,000 children. More specifically, the increase in anticonvulsants was noted among individuals diagnosed with bipolar disorder.[35]

The increasing amount of psychotropic medication prescription and use in youth has alarmed and gained the attention of parents, professionals, and youth advocates. One only needs turn on the television or open newspapers and magazines to find this out. For example, the *Today Show* covered this topic on June 22, 2005. *Time, Newsweek*, and the *New York Times* have also recently addressed this topic.[14,36,37] These concerns relate to the positive and negative acute- and long-term effects these medications have on youth. Although many medications improve mood symptoms, many carry with them significant potential risks.

Side effects, or unwanted reactions to medications, do occur. There are documented cases in which youth have been prescribed an SSRI for depression and then displayed manic symptoms (e.g., excessively elevated mood and irritability).[28] Predictors that best identified if a youth would experience

disinhibition related to medications included younger age (less than eight); if disinhibited behaviors were present before the administration of the medication trial; and if the youth experienced clinically diagnosed ADHD.[38] However, others suggest that there is no evidence that antidepressants promote manic symptoms in youth. Results are mixed on the possibility of stimulant medications inducing manic episodes. Some studies have found no effects of stimulant use exacerbating manic symptoms, whereas other outcomes suggest an association between the administration of stimulant medication and the onset of manic symptoms.[39] Overall, the most significant current concern regarding the safety of youth being treated with psychotropic medications is the potential of suicidal ideation and attempts related to antidepressant medications in the treatment of mood disorders. Controlled studies have found mixed results regarding the increase of such thoughts and actions in youth being treated with these medications.[40]

Recently the pharmaceutical companies who develop and sell these medications have been scrutinized for lack of consumer protection. More specifically, outcomes have suggested that SSRIs are linked to suicidal ideation and attempts in youth. These results prompted the U.S. Food and Drug Administration (FDA) in June 2003 to alert medical professionals about the possibility of danger these medications pose to their younger clients. Further, the FDA began to propose and initiate more stringent guidelines and consumer information regarding the use of antidepressant medication in the treatment of youth diagnosed with mood disorders. These guidelines, which were voted on by the FDA in September 2004, called for black-box warnings stating the potentially dangerous side effects of taking antidepressant medications. The following month the FDA directed all manufacturers of antidepressant medications to add a black-box warning to these medications. More recently, practice parameters in the United Kingdom suggest that psychotherapy should be the first line of treatment for youth with depression.[41] Thus, as with any potentially potent intervention, benefits must be weighed against risks when deciding whether or not to use medications.

Light Therapy

Light therapy is used to increase the level of neurochemicals produced in the brain by exposing the individual to specially designed artificial light sources. In the 1980s researchers began to consider how the effects of bright light exposure to suppress and release melatonin impacted seasonal changes in mood.[42] The Society for Light Treatment and Biological Rhythms spawned from this research. Light therapy is effective at improving symptoms of seasonal and nonseasonal depression,[43] as well as treating depressed mood in a pediatric population.[44]

Electroconvulsive Therapy

Electroconvulsive therapy (ECT), another type of biological treatment, was first used in the 1940s. Since its introduction, it has been employed to treat various psychiatric illnesses in youth and adults, including severe depression, schizophrenia, and dementia. Historically, ECT has been criticized for its severe side effects (e.g., short-term memory impairment, broken bones due to convulsions). However, with the inception of newer medications (e.g., muscle relaxants and anesthetics) the patient is less likely to harm himself or herself during the procedure, and recent studies have documented less memory impairment than had previously occurred.[45] Despite ECT's effectiveness at treating severe pathology in youth,[46] it continues to be a last resort treatment for chronic and treatment-resistant mood disorders. Newer and potentially more effective treatments with fewer side effects are being developed. These include transcranial magnetic stimulation (TMS) and vagus nerve stimulation (VNS).

Summary

The overarching goal of biological treatments is to treat, rather than ameliorate, psychological distress. This distinction is important to make. For example, in treating acute medical illnesses such as the flu, the illness runs its course but medication helps ease suffering from the symptoms. Chronic illnesses such as diabetes and cancer are managed by adhering to a medication regimen. Biological treatments for mood disorders share similar ties with both acute and chronic illness treatment. More specifically, psychotropic medications do not cure the illness but instead ease and improve some symptoms. Curing the illness, in the medical sense of the phrase, does not occur. Maintenance on a medication regimen may bring the illness into remission, just as judicious insulin management can keep diabetes under control. Thus, while medications may improve mood symptoms, they will not completely ameliorate the illness. Therefore, other methods of treatment must be considered in conjunction with medications.

Psychotherapeutic Treatments

Psychotherapy, or talk therapy, is another form of intervention for youth with mood disorders. As with medications, psychotherapy does not cure a mood disorder but instead provides strategies for the youth to manage his or her symptoms. Overall, psychotherapy has been found to be an effective intervention for ameliorating emotional and behavioral distress in youth.[47]

Depression

Various types of psychotherapy have been studied to determine their effectiveness in improving depressive symptoms in youth. Those with significant research support are discussed below.

Social skills training addresses deficits in interpersonal socialization. Depressed youth have social problem-solving, social information-processing, and conflict-negotiation skills deficits.[48] Social skills training assists depressed youth in improving their problem-solving and interpersonal skills deficits and in maintaining these gains over time.[48,49]

Cognitive behavioral therapy (CBT) attempts to ameliorate depressive symptoms by changing an individual's cognitive distortions and increasing positive mood states and interpersonal interactions. The goal is to teach youth alternative problem-solving skills and hypothesis testing, increasing interpersonal social skills and confronting and challenging negative cognitions. CBT is clinically effective at decreasing levels of depression, negative cognitive distortions, and suicidality.[50] Individual CBT produces larger treatment gains for youth between the ages of 9 and 18 with depression than family therapy, relaxation training, self-modeling, or supportive therapy.[51] These results were consistent across ethnic groups. Individual CBT and CBT with parental involvement appear superior to other forms of treatment for youth with depression.[51]

Interpersonal Family Therapy (IFT) focuses on patterns of family interactions that impact the youth's depression and as deals with the effects of depression on the family system. Pilot studies indicate that IFT is beneficial at decreasing levels of emotional disturbance in youth.[52]

Interpersonal Psychotherapy for Adolescents (IPT-A) takes into account not only the youth's cognitions and behaviors but also interpersonal interactions and the associated patterns of communication.[52] By identifying and altering dysfunctional interactions, an individual should experience more positive interactions and, therefore, lower levels of depressive symptoms.[52] IPT-A has a large psychoeducational element, which focuses on increasing interpersonal skills in the individual. Although developed as an individual therapy, youth treated with IPT-A may also have their caregivers involved in the sessions.

Psychoeducation combines CBT and family therapy components to increase the youth's and caregiver's awareness of mood disorders and symptoms, identify family patterns and interactions that may exacerbate mood symptoms, and develop strategies to better manage mood disorders. Psychoeducation programs have been successful at alleviating emotional distress and improving family interactions.[53,54] Psychoeducation treatment with older youth has increased caregivers' knowledge of mood disorders.[54]

Bipolar Disorder

There is less research on psychotherapy for youth with bipolar disorder. However, it is agreed that pharmacotherapy is standard treatment for bipolar disorder, with psychosocial interventions serving as an important adjunctive treatment.[28] Given the degree of impairment that results from mood disorders, as previously discussed, effective treatments are necessary. The U.S. Surgeon General's *Report on Mental Health* also identified and outlined the need for such interventions.[55] One type of intervention, psychoeducation, has been studied by three groups of researchers and is reviewed below.

Multi Family Psychoeducation Group (MFPG) and *Individual Family Psychoeducation (IFP)* are manual driven treatments for youth with mood disorders and their caregivers.[54] MFPG is provided in a group format (e.g., parent group and child group), allowing for both youth and caregiver to experience similar treatment interventions simultaneously and then collaborate on weekly projects to practice treatment topics outside of group. IFP is provided in an individual therapy format with some sessions dedicated to either the youth or caregiver and some dedicated to working collaboratively with both the youth and caregiver. IFP also employs weekly projects for the youth and caregiver to practice skills outside of treatment. Both MFPG and IFP assist to increase caregivers' knowledge of mood disorders; positive communication with their children; knowledge about medications, mental health services, and educational interventions for their children; and coping and problem-solving skills. Simultaneously, MFPG and IFP assist youth to increase their knowledge of mood disorders; increase their communication skills; and develop coping and problem-solving skills.

Child- and Family-Focused Cognitive Behavioral Therapy (CFF-CBT) implements CBT tenets in an individual and family setting.[56] CFF-CBT uses the acronym RAINBOW to identify treatment topics that focus on symptom education and management as well as coping and problem-solving skills development. Additionally, the rainbow of colors is used to identify mood disturbance severity and baseline functioning.

Family-Focused Treatment for Adolescents (FFT-A) originated from a similar treatment for adults with bipolar disorder.[57] This treatment involves educating the youth and family regarding mood cycling and factors that influence these changes; symptom management; medication education; identifying the strengths of the youth; and addressing ways to increase mood stability in the family environment.

Preliminary results suggest that MFPG, IFP, CFF-CBT, and FFT-A are promising treatments that warrant further research.[54–57] However, given

the limited number of these empirically supported outcome studies for the treatment of youth with bipolar disorder, more research development and implementation of treatments for this population is necessary.

Summary

Psychotherapeutic/psychosocial interventions are effective treatments for youth experiencing mild to moderate mood disorders. However, when the level of distress is severe, the combination of psychosocial treatment and medications is often necessary. Combination therapy is more often the choice for youth with bipolar disorder, given that medications and adjunctive psychosocial treatments provide the most effective treatment results.

CONCLUSION

Depression and bipolar disorder presenting prior to adulthood is a real phenomenon that has received growing awareness among parents, professionals, the government, and youth advocates. The stories of youth and their illnesses as well as their treatments have been covered by every large media source and can be readily found with the click of a mouse on any major Internet search engine. Throughout history, mood disorders have impacted countless individuals. Today we know more than ever about how to diagnose and treat mood disorders. However, treatments carry with them risk as well as potential benefit. Hopefully, increased public awareness will accelerate the drive to obtain new, safe, and effective treatments for depression and bipolar disorder in youth.

RESOURCES

Books for Children with Mood Disorders

Brandon and the Bipolar Bear by T. Anglada
The Storm in My Brain by Child and Adolescent Bipolar Foundation (CABF)
Kid Power Tactics for Dealing with Depression by N. and S. Dubuque
Matt, the Moody Hermit Crab by C. McGee
My Bipolar, Roller Coaster, Feelings Book by B. Hebert
Anger Mountain by Bryna Hebert

Books for Adolescents with Mood Disorders

When Nothing Matters Anymore: A Survival Guide for Depressed Teens by B. Cobain
Recovering from Depression: A Workbook for Teens by M.E. Copeland and S. Copans

Conquering the Beast Within: How I Fought Depression & Won . . . and How You Can, Too by C. Irwin

Everything You Need to Know about Bipolar Disorder & Manic Depressive Illness by M. A. Sommers

Books for Parents of Children/Adolescents with Mood Disorders

A Parent's Survival Guide to Childhood Depression by S. Dubuque

Raising a Moody Child: How to Cope with Depression and Bipolar Disorder by M. A. Fristad and J. Goldberg Arnold

New Hope for Children and Teens with Bipolar Disorder by B. Birmaher

The Bipolar Child by D. Papolos and J. Papolos

The Ups and Downs of Raising a Bipolar Child by J. Lederman and C. Fink

If Your Child is Bipolar: The Parent-to-Parent Guide to Living with and Loving a Bipolar Child by C. Singer and S. Gurrentz

Organization, Support Groups, and Web Sites

National Alliance for the Mentally Ill (NAMI): www.nami.org

National Mental Health Association (NMHA): www.nmha.org

Depression and Bipolar Support Alliance (DBSA): www.dbsalliance.org

Child & Adolescent Bipolar Foundation (CABF): www.bpkids.org or www.cabf.org

Juvenile Bipolar Research Foundation (JBRF): www.bpchildresearch.org

Parenting Bipolars: A Survival Guide for Parents: www.parentingbipolars.com

Bipolar Children Newsletter: www.bipolarchild.com

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Adult Depression: Features, Burdens, Models, and Interventions

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Generally characterized by sad mood and associated cognitive, behavioral, and physical symptoms, depression is one of the most widespread psychiatric conditions. It has been estimated that over 18 million Americans will suffer from some type of depression each year[1] and that approximately 20 percent of the U.S. population will experience a significant depressive episode in their lifetime.[2] In addition to its high prevalence, depression has been associated with remarkably high rates of impairment across psychological, interpersonal, health, and occupational realms.[3,4] Furthermore, depression incurs considerable personal and societal costs,[5] including an extremely high economic burden.[1,6] In fact, unipolar major depression is projected to become the leading source of disease burden in established economies by 2020.[7] It is no wonder that Seligman argued that the public faces a depression "epidemic."[8]

Heightened recognition of its prevalence and appreciation of its damaging personal and societal effects have stimulated strong basic and applied research agendas aimed at better understanding depression, as well as how to prevent and treat it. A number of effective treatments, resting on different theoretical models of depression's etiology, have been developed for people suffering from depression. However, these treatments do not work for everyone, nor do they always prevent relapse or recurrence. Thus, research examining basic processes involved in depression onset and maintenance, as well as developing more effective

treatments, continues. Focusing on the adult population, the present chapter presents a contemporary look at the clinical features, epidemiology, burdens, theoretical models, and associated treatments related to adult depression.

CLINICAL FEATURES

Classification, Symptomatology, and Differential Diagnosis

The current edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM–IV–TR)*[9] defines depression as a mood disorder. With its categorical approach to classifying mental illness, the *DSM–IV–TR* divides multiple mood disorders into four categories: (1) depressive disorders, (2) bipolar disorders, (3) substance-induced mood disorders, and (4) mood disorders due to a general medical condition. Our main focus is on the depressive conditions, and even more specifically on major depressive disorder in adults. The *DSM–IV–TR* diagnosis of major depressive disorder requires the presence of one or more depressive episodes that last for at least two weeks and cause marked distress or impairment in the person's life. A depressive episode is characterized by the individual experiencing a significantly dysphoric mood or loss of interest or pleasure in nearly all activities and at least four other symptoms, including appetite or weight changes, sleep difficulties, psychomotor agitation or retardation, loss of energy, feelings of worthlessness or excessive guilt, difficulty concentrating, and suicidal ideation. In addition to the time course and symptomatic picture, the diagnosis requires that the difficulties are not directly related to the physiological effects of a substance or a general medical condition (which would fall respectively into mood disorder categories 3 and 4 above). Moreover, the symptoms should not be better accounted for by a normal period (i.e., less than two months) of bereavement following a significant loss.

Also under the depressive disorders category, the *DSM–IV–TR* defines dysthymic disorder as a long-standing (at least two continuous years), low-grade depression. Generally speaking, the same symptoms as a major depressive episode apply. However, the diagnosis reflects fewer and less severe symptomatology, with less intense distress or impairment in the person's life. In a way, dysthymic symptoms become integrated into a person's baseline, normative functioning. Dysthymic individuals can also be diagnosed with major depressive disorder if full criteria for a depressive episode are met. When major depressive disorder occurs during an episode of dysthymia, it is referred to as "double depression."

Both major depression and dysthymia imply the absence of manic or hypomanic symptoms. Mania is characterized by abnormally expansive or irritable

mood lasting for at least a week in addition to other symptoms such as grandiosity, decreased need for sleep, pressured speech, racing thoughts, distractibility, marked increase in goal-directed activity, and excessive involvement in activities that are pleasurable but have a high likelihood of negative consequences (e.g., spending large amounts of money, risky sexual behavior). Manic episodes are severe enough to cause marked impairment in social or occupational functioning or to require hospitalization. In contrast, hypomanic episodes, while involving similar symptoms, are less severe than full manic episodes and are associated with lower levels of social and occupational impairment. If someone does exhibit clinically significant expansive or irritable mood, the diagnosis would fall under category 2 above as a bipolar I disorder (which requires the presence of a full manic episode) or a bipolar II disorder (which requires the presence of a hypomanic episode and the absence of any history of full-blown mania). In the case of an individual having both low-grade depressive symptoms and hypomanic symptoms over an extended period of time, a diagnosis of cyclothymic disorder may be applicable.

When an individual has clinically significant mood symptoms (not directly related to substance use or a general medical condition) but otherwise fails to meet full criteria for a depressive or bipolar condition, he or she could be diagnosed with depressive (or bipolar) disorder not otherwise specified. Again, the main focus of this chapter is on relevant features of major depressive disorder.

Diagnostic Subtypes

In addition to the overarching mood disorder categories discussed above, the *DSM–IV–TR* includes multiple subtypes and specifiers to add further descriptive detail to an individual's condition. For major depressive disorder, a multitude of such specifiers exist. For example, an episode of depression can be qualified as having "melancholic" features, which include a specific cluster of symptoms including significant loss of pleasure, failure of mood to improve even when something good happens, early morning worsening of mood, marked psychomotor retardation, significant weight loss, and excessive and inappropriate guilt. "Atypical" features of major depression include mood reactivity, significant weight gain or increased appetite, excessive sleeping, leaden paralysis, and heightened sensitivity to interpersonal rejection. Postpartum onset in women reflects a rather severe depressive episode that occurs within four weeks after giving birth. The "seasonal pattern" specifier reflects a regular temporal relationship between the depressive episodes and the time of the year (e.g., consistently feeling depressed in the winter but not in the summer).

As mentioned previously, "double depression" reflects the combination of dysthymic disorder and major depressive disorder. "Chronic" major depression applies when the full criteria for a major depressive episode are met continuously for at least two years. This chronic subgroup has several distinctive features including high rates of recurrence, comorbid personality disorders, elevated rates of psychiatric hospitalizations, and, for women, low educational achievement, which may contribute to underemployment and lower income.[10]

Phenomenological Subtypes

Although the above *DSM–IV–TR* categories and subtypes capture some of the heterogeneity within depressive disorders, it is important to highlight several limitations of the categorical approach to classification. First, *DSM* categories may oversimplify the complex nature of depression, as well as other mental disorders, by focusing on symptom presentation rather than on the biological, psychological, and social etiological factors.[11] Second, the current criteria suggest that depression is an illness that either does or does not exist. Such a dichotomized perspective ignores the likelihood that depression manifests itself on a continuous scale and, thus, is better assessed in terms of degrees and clinical significance as opposed to numbers of symptoms and static temporal anchors.[11] Moreover, the categorical approach to diagnosis deflects attention from those with sub-syndromal symptoms, who suffer nonetheless.[2] And finally, although diagnostic and descriptive subtypes have been advanced, they may not accurately capture individual differences in one's phenomenological experience of depression. Without a better understanding of such differences in phenomenology, it is possible that treatment decisions could be misguided.

McWilliams, for example, presented a clinical vignette of how two individuals may be clinically depressed with essentially identical symptomatic profiles and yet have markedly different subjective experiences.[12] In her description, one man feels badly because he views himself as morally deficient, whereas the other man feels empty and views himself as defective (but not morally reprehensible). Both men are contemplating suicide, but for very different reasons. The former believes that his evilness is poisoning the world and that the world would be a better place without him. The latter feels no investment in improving the world but, rather, simply sees no reason to live. As discussed by McWilliams, the first person likely received messages from important others that he was bad, which led to a predominant feeling of guilt. The second person may have received little attention or few messages from important others, lacks

a clear sense of self, and feels inconsequential, prompting a profound sense of shame. From a treatment perspective, if a psychotherapist were to respond to the first person with a supportive and overly sympathetic tone, the patient may feel that his negative self-view is being invalidated. This lack of verification and understanding on the part of the therapist may lead to even greater depression. With the second person, however, such warm and supportive interventions may instill a sense of hope and provide at least a temporary relief from his emptiness. The above vignettes speak to the limitations of a simple categorical perspective on depression and to the importance of including a self dimension in clinical diagnosis, subtyping, and treatment planning.[13] A fuller discussion of depression treatment occurs later.

In addition, several theorists have articulated phenomenological subtypes of depression based theoretically on one's early experiences, personality style, and self-schemas. Freud, for example, articulated two fundamental and relatively independent experiences of depression. One experience was predominantly interpersonal in nature with issues related to dependency, helplessness, and fear of loss and abandonment. The second experience was more intrapsychic and was characterized by self-criticism, concerns about self-worth and competence, and feelings of guilt and failure.[14]

Consistent with Freud's subtypes, Blatt argued that depressed individuals can be either anaclitic or introjective.[15] According to Blatt, anaclitic individuals' sense of self and well-being is closely tied to getting their dependency needs met from others (i.e., receiving a steady dose of love, support, and assurance). Thus, these individuals tend to value others only for their instrumental capacity to provide immediate gratification of these rather primitive attachment needs. When the other person is unable to meet these strong dependency demands, it provokes the anaclitic individual to feel unloved, unwanted, and abandoned, and, in turn, sad. The anaclitic individual is conceptually similar to Beck's sociotropic depressive subtype.[16] Introjective individuals, on the other hand, have much more of a self-preoccupation surrounding issues of perceived failure or personal inadequacy. Thus, these individuals view others not so much as a source of attachment gratification but more as an opportunity to provide approval, acceptance, and validation. The acceptance and positive impact of such feedback, however, is often short-lived, as introjective individuals' high self-criticism and self-loathing tend to predominate. Furthermore, the introjective individual's quest for approval and acceptance often precludes any fully present enjoyment of the moment. Intense feelings of guilt, shame, and self-doubt not surprisingly give rise to a dysphoric mood. The introjective individual is conceptually similar to Beck's autonomous depressive subtype.

The above discussion of diagnostic and theoretical subtypes of depression is by no means exhaustive. Rather, it is meant to highlight some of the more common types of depression, which despite having a similar symptom assemblage may nonetheless reflect significantly different causes, courses, and subjective experiences. Although there is not perfect agreement on the exact types and nature of depression or whether it is best to use a categorical or dimensional classification system, there is a consensus that depression can mean very different things for different people. Nonetheless, the *DSM–IV–TR* remains the most widely used diagnostic system, with its own merits. Most notably, this taxonomic system provides a common language that can facilitate clear communication among clinicians and researchers. Such research includes large-scale epidemiological studies, which allow us to estimate the prevalence and nature of clinical conditions. The epidemiological features of depression are discussed next.

EPIDEMIOLOGY

Prevalence and Course

Drawing on data from community samples in the United States, it has been estimated that 10 to 25 percent of women and 5 to 12 percent of men will experience depression at some point in their lifetime.[9] Point prevalence rates (i.e., the number of people at a given point in time who are experiencing the disorder) have been estimated at 5 to 9 percent for women and 2 to 3 percent for men. Greenberg et al. found that 8.7 percent of adults experienced depression in 2000 (i.e., 12-month prevalence),[1] which reflected a small decline from the 10.1 percent in 1990.[6] In addition to major depression, it has been estimated that 6 percent of the population will experience dysthymia or "double depression."[9] With the exception of the significant gender difference, depression rates tend to cut evenly across demographic domains, that is, ethnicity (although conceptions of depression can vary in other cultures), education, socioeconomic status, and marital status.[5] Within specific contexts, however, depression can be particularly common. For example, the 12-month prevalence rate for major depression is 2–3 times higher for medical patients than for community samples.[17] In addition, individuals suffering from chronic illnesses such as diabetes and asthma have a higher likelihood of having significant depressive symptoms than general community samples.[18, 19]

The onset of depression may occur at any point from childhood to old age. Considerable evidence has suggested that the average age of onset is in the early to mid-twenties.[2, 9] However, more recent epidemiological data suggest that depression is a disorder of younger onset for those born more recently.[2, 9]

Some studies have demonstrated that initial episodes of depression often occur in adolescence[20] and that there is a high likelihood that depressive episodes will recur in adulthood.[21, 22]

Full major depressive episodes typically develop over the course of days to weeks, often following a period of anxiety or mild depression. The length of each episode can vary, with untreated episodes often lasting at least six months.[9] According the *DSM–IV–TR*, naturalistic studies have revealed that one year following the diagnosis of a major depressive episode, 40 percent of individuals still meet full criteria, 20 percent continue to have subclinical depressive symptoms (i.e., partial remission), and 40 percent are no longer depressed (i.e., full remission). Although many individuals will completely recover from a major depressive episode, depression is a highly recurrent condition. In some estimates, over 75 percent of individuals have more than one episode.[23] The course of recurrent major depression varies from person to person. Some individuals have episodes that are separated by long periods of full remission. Others may have similar time between full episodes but only achieve partial remission. Still others may have clusters of episodes or may have an increasing number of episodes as they get older. And finally, some individuals with major depression (approximately 20%) will experience the full impact of depressive episodes lasting two or more years. What does seem consistent is that the number of previous episodes is a reliable predictor of future episodes. This point is underscored in community samples where people who have had two depressive episodes have a 70 percent chance of having another, and individuals having had three episodes have a 90 percent chance of having a fourth.[9] Other data suggest that without treatment, recurrence rates after two to three episodes range from 60–85 percent.[24, 25] Furthermore, periods of remission tend to shorten with each passing episode.[23, 26]

Gender Differences

There is a substantial gender difference in the prevalence of depression. It has been estimated in large-scale community epidemiological studies that women are 1.5 to 3 times more likely to experience clinical depression than men.[27, 28] Women also tend to report subclinical depression at a higher rate than men.[29] This gender difference is consistent across most demographic and cultural groups, as well as in different countries.[30] Furthermore, the gender difference appears to surface around the age of 12 to 13.[31] Prior to this, boys and girls have similar rates of depression. The 1.5–3 to 1 (female to male) ratio exists by late adolescence and remains through adulthood.[30] Data also suggest that the gender difference in depression is attributable to a greater number

of index episodes in women than men, as opposed to differences in duration, recurrence, or speed of recovery from the illness.[28, 32]

Multiple explanations for the gender difference in depression have been advanced. For example, biological explanations have focused on hormonal changes in women during puberty, premenstruation, postpartum, and menopause, as well as possible gender differences in biological reactivity to stress.[30] Psychological explanations have included women's interpersonal orientation and the related emotional costs of being, compared to men, more emotionally tied to others and to the outcome of interpersonal events. Another psychological explanation focuses on the tendency for women to ruminate about their distress more than men.[33] Such rumination, it is argued, hinders one's ability to cope with and to overcome depression because it maintains negative thinking, decreases motivation, and interferes with concentration and problem-solving abilities. Social explanations have focused on chronic stressors that women face based on their social standing and traditional gender role obstacles.[34]

Although all of the above gender difference hypotheses have received theoretical and empirical attention, few have received unequivocal support. Furthermore, as argued by Kessler, many such theories are flawed in their focus on explaining gender differences in the chronicity of depression (for which a gender difference does not exist).[27] According to Kessler, there is ample reason to question all of the explanations presented above. The most plausible explanations for the gender difference, he argued, include sex hormones, genes, subtle socialization experiences in adolescence, and gender experiences that may lead to depression vulnerability. Recent work has also focused on the role of personality in explaining gender differences in depression. For example, Goodwin and Gotlib found that levels of neuroticism may moderate the association between gender and depression among adults.[34] Clearly, the gender difference issue is a complex one that will require future research with a clearly defined focus and appropriate methodology to address the seemingly primary question, why do women have more first episodes of depression than men?[27]

Comorbidity

Epidemiological studies reveal substantial comorbidity between depression and other disorders. For example, data from the World Health Organization Collaborative Study and the National Comorbidity Study showed that 62 percent and 74 percent, respectively, of patients with major depressive disorder also met criteria for one or more concurrent psychiatric disorders.[35,36] The most frequent co-occurring psychological conditions are anxiety disorders (especially generalized

anxiety disorder, panic disorder, and post-traumatic stress disorder). In addition to psychological comorbidity, depression also tends to co-occur with medical conditions. For example, approximately 40 percent of people who suffer a stroke or myocardial infarction will develop some symptoms of depression afterward.[37, 38] There is also evidence that depression and chronic pain often coexist,[39] with a recent large primary care study showing that approximately two-thirds of patients with major depression also reported chronic pain.[40]

In addition to epidemiological comorbidity, there is some evidence that the co-occurrence of depression and medical conditions has an interactive effect on outcomes. For example, depression in diabetic patients is associated with poor glycemic control and increased risk for medical complications.[41] The mortality rate for persons recovering from myocardial infarctions is three times higher if the person is depressed versus nondepressed.[42] Depressed stroke patients are also at higher mortality risk than nondepressed stroke patients.[43] The combination of major depression plus disabling chronic pain is associated with significantly poorer health-related quality of life and more instances of panic disorder than among those with depression and non-disabling pain or without chronic pain.[40] While this list of comorbid conditions is by no means complete, it reveals that comorbid conditions are the norm rather than the exception among depressed individuals.

BURDENS

Personal, Familial, and Societal

Depression has a substantial functional impact on all aspects of the sufferer's life, including home, family, work, and school.[5, 44] Furthermore, depression produces adverse social outcomes, including some that may be irreversible—for example, decreased educational attainment and increased teenage parenting.[45, 46] In the Medical Outcomes Study, the functional impairment associated with depression was comparable to or greater than the impairment associated with other common and chronic medical conditions (e.g., hypertension, diabetes, arthritis).[47] Moreover, in the Global Burden of Disease Study, unipolar depression was second only to ischemic heart disease in disease burden in established economies.[7] Thus, depression produces more burden than problems like cardiovascular disease, alcohol use, and even injuries associated with road traffic accidents. As previously mentioned, depression is projected to supplant ischemic heart diseases as the leading cause of disease burden by 2020. And when focusing specifically on the middle years of life, depression is already—and by far—the single most burdensome illness in both developing and developed nations.[48]

In addition to personal emotional costs, depression has been shown to affect an individual's work functioning. Depressed individuals are more likely to experience work loss than those with any other mental illness.[48] Furthermore, depression leads to greater work loss than impairing nonpsychiatric conditions such as neurological problems, diabetes, and history of heart disease and cancer.[49] Another obvious personal and human cost is that of suicide, which accounts for over 30,000 deaths per year in the United States. Depression is a major risk factor for completed suicide. In fact, suicide rates for people experiencing a current depressive episode represent a 50-fold increase over the population base rate.[50] Depression also has a highly negative impact on family functioning. For example, maternal depression is associated with disruptions in children's emotional and cognitive development.[51] In addition, children of depressed parents are three times more likely than children of nondepressed parents to experience depression themselves.[52] Depression has also been associated with martial instability,[53] as well as marital dissatisfaction in women.[54]

Financial

The financial costs associated with depression include those related to direct care (e.g., psychiatric/medical services), mortality (e.g., suicide), and morbidity (e.g., reduced work productivity). In 1990, the financial burden of depression was estimated between 43.7 and 52.9 billion dollars.[6, 55] In 2000, the figure was 83.1 billion dollars.[1] The 2000 figure actually represents just a 7 percent increase over the inflation-adjusted figure of 77.4 billion for 1990, indicating that the financial burden of depression has remained rather stable, despite a significant increase from 1990 to 2000 in people seeking treatment.[1] For the 2000 overall cost figure, $26.1 billion (31%) was attributed to direct treatment costs, $5.4 billion (7%) to suicide-related costs, and $51.5 billion to work costs associated with absenteeism and reduced productivity due to depression. With respect to direct service costs, even after controlling for chronic medical illness, the medical costs of depressed individuals are approximately 1.5 to 2 times greater than those of individuals who are not depressed. In one study, depressed individuals visited the emergency room seven times more frequently than nondepressed individuals.[56] Clearly, depression is associated with large decrements in daily social and emotional functioning as well as overall quality of life. Furthermore, there is a huge cost to the individual and to the society at large in dealing with this prevalent and often chronic condition. Thus, there is a pressing need to improve our understanding of the etiology of depression. Contemporary theoretical models regarding the nature and causes of depression as well as associated treatment approaches are discussed next.

THEORETICAL MODELS AND ASSOCIATED TREATMENTS

The cause of depression is still poorly understood. The limited understanding that we do have can be likened to the parable of "The Blind Men and the Elephant"; different scientists deduce different explanations for its cause, depending upon the branch of science that they are studying. What we can say with some degree of certainty is that the cause of depression is multifactorial, with contributing elements from both nature and nurture.

Biological Models and Treatments

Heritability studies, in which scientists trace the patterns of inheritance of a given disease through multiple generations of one family, provide strong evidence that depression is at least in part genetic.[57] If a parent has depression, his or her child is at increased risk for developing depression but will not *necessarily* develop the disorder. Twin studies demonstrate that 40–50 percent of the risk of depression is genetic.[58] In other words, if one twin has depression, the other is at increased risk for developing depression, despite different environments and life experiences. Although the evidence is strong for a genetic contribution to depression, no specific gene has been identified.

Potential nongenetic causes of depression are also important. Emotional or physical traumas (e.g., childhood abuse, war, and isolation) are often associated with depression. Even a minor stressor can cause depression in individuals who are genetically predisposed.[59] The delicate balance between genetic vulnerability and environmental factors is different for each person. Physical illness can also be a trigger for depression, and some illnesses are more commonly associated with depression than others; for example, hypothyroidism, stroke, or Parkinson's disease.[60]

In addition to genetic and environmental factors, some scientists speculate that depression itself can lead to depression, in a process known as "kindling." Broadly speaking, the kindling hypothesis states that depression itself is traumatic to the brain, making depressed individuals more vulnerable to future depression.[61] This hypothesis is based in part on studies of seizure activity in rodents, where the amount of electrical stimulation needed to trigger a seizure is less and less with each subsequent seizure.[62] The kindling hypothesis is also consistent with the natural history of depression. As mentioned previously, the more episodes of depression the individual has experienced, the greater the likelihood of additional recurrences in the future.[26]

It can be confidently asserted that depression is associated with biochemical brain changes. Our understanding of such depression-related changes has

advanced greatly in the last half century. Using special brain imaging techniques to compare depressed and nondepressed individuals, it is clear that many parts of the brain are involved in this disease process. It appears that some parts are too active during depression, and some parts too quiescent.[63] Three theories seek to explain what is happening on a biochemical level: the monoamine theory, the hypothalamic-pituitary-adrenal (HPA) axis dysregulation theory, and the neurotrophic damage theory. Each theory, as well as the evidence to support it, is discussed in turn. It is important to keep in mind that the validity of one theory does not necessarily refute the validity of another, and that all three may play some role in the pathophysiology of depression.

The monoamine theory of depression emerged from treatment response rather than systematic investigation into brain changes during depression. Neurons in the brain communicate with one another by sending signals. Molecules are released from the end (dendrite) of one neuron to receptors at the beginning (axon) of the next neuron. The space between neurons traversed by the molecule is called the synaptic cleft, and the molecule itself is called a neurotransmitter. Monoamine neurotransmitters include serotonin, norepinephrine, and dopamine. Antidepressant medications typically increase the amount of monoamine neurotransmitters in the synaptic cleft. Scientists postulated after the fact that monoamine neurotransmitters play a central role in the biochemistry of depression and that low levels of serotonin, norepinephrine, and/or dopamine in the cleft are responsible for the symptoms of depression. There is some evidence that supports this theory, in the form of low serotonin levels in the cerebrospinal fluid and brain parenchyma of depressed individuals.[64] The evidence, however, is generally quite sparse. Also, antidepressant medications typically take four to six weeks to take effect, but the levels of monoamines in the cleft rise immediately with medication, implying that antidepressant efficacy works by some other mechanism. Nonetheless, it is generally accepted that serotonin, norepinephrine, and dopamine play an important role in depression. That role, however, has yet to be fully determined.

The hypothalamic-pituitary-adrenal (HPA) axis dysregulation theory is a well-supported theory of how depression disrupts normal brain function. The HPA axis, under normal circumstances, mediates the stress response. Neurons in the hypothalamus (located in the brain itself) secrete corticotrophin releasing factor (CRF), which acts on the pituitary (located at the base of the brain) to release adrenocorticotrophin (ACTH). ACTH then travels through the bloodstream down to the adrenal glands (located above the kidneys in the abdominal cavity). The adrenal gland is then stimulated to make and release glucocorticoids, or cortisol. Cortisol, sometimes referred to as adrenaline, is the natural steroid made by the human body. Cortisol in turn circulates through the body and has

profound effects on metabolism and brain function. It also has an inhibitory effect on the hypothalamus, called a negative feedback loop. The release of cortisol, under normal conditions, should lead to a decrease in CRF and a decrease in ACTH and ultimately cortisol.

However, under conditions of prolonged or severe stress, cortisol remains elevated at high levels, which in turn may damage key parts of the brain, such as the hippocampus. Damage to the brain may include dysfunction of the inhibitory feedback loop, thereby further prolonging elevated cortisol levels. This process may contribute to depression. Evidence for this theory includes the following: (a) animals exposed to early life stress show persistent HPA-axis abnormalities, which can be normalized with antidepressant treatment;[65] (b) increased activation of HPA axis is seen in about 50 percent of people with depression and can be corrected with antidepressant treatment;[66] and (c) increased activation measured by increased urinary cortisol, increased CRF in cerebrospinal fluid, or decreased ability of the exogenous synthetic glucocorticoid, dexamethasone, to suppress blood levels of cortisol and ACTH.

The neurotrophic damage theory posits that a more diffuse process causes depression, rather than a problem localized to any one brain region. This theory identifies lack of brain-derived neurotrophic factor (BDNF) as contributing to depression. BDNF is a chemical in the brain that regulates growth and differentiation of neurons. Support for this theory includes data showing that stress leads to decreased levels of BDNF in the hippocampus of rodents[67] and that long-term administration of antidepressants increases BDNF.[68]

Other theories regarding the pathophysiology of depression are more speculative.[69] One involves impairment in the brain reward pathways, the same area of the brain that mediates addiction to substances of abuse. Impairment of this region might affect an individual's ability to experience pleasure from everyday emotions and activities. The depressed person might be unable to take joy in food or sex or a good movie, because damage to the reward pathway prevents dopamine and endogenous opioids from contributing to a "natural high." Another theory implicates the hypothalamus, a region of the brain involved in the regulation of sleep, appetite, and circadian rhythms, which are often abnormal in depressed persons. And yet another theory involves the amygdala. The amygdala plays an important role in the conditioned fear response and is likely integral to emotional memory.

Despite our still limited understanding of what causes depression, we have come a long way in the treatment of depression. Depression today is treated with antidepressant medications, psychotherapy, or a combination thereof. More severe and treatment-resistant forms of depression are targeted with

electroconvulsive shock therapy (ECT). In this section, we focus on the biologically based treatments.

Antidepressant medications were discovered serendipitously about 50 years ago, when it was found that medications to treat tuberculosis actually helped with mood. As scientists began studying how these medications worked, they discovered that the modulation of neurotransmitters such as serotonin and dopamine seemed to be the key to antidepressant efficacy. The acute mechanism of most antidepressants in existence today is the enhancement of serotonin, norepinephrine, or dopamine in the synaptic cleft. However, mood-elevating effects take weeks to months, suggesting that enhanced monoamine neurotransmission per se is not the mechanism of the antidepressant effect. Some gradual downstream adaptation to the acute effects of the drugs is the likely mechanism; however, its exact nature remains a mystery. No one antidepressant has been shown to be superior to another, and the choice of antidepressant for a given individual usually depends on the treatment history of that person, as well as the side effect profile of the drug.

Patients who do not respond to the initial antidepressant trial are tried on another, and if that fails, yet another. Trial and error is important given that response is variable between individuals, and whereas one antidepressant might not be effective for a given patient, another may result in complete remission of symptoms. According to a recent study, up to 65 percent of patients ingesting up to three antidepressants consecutively show total or near-total remission of their symptoms of depression.[70] However, even these good response rates demonstrate that a large minority of patients with depression continue to have some or all of their symptoms, even after pharmacologic treatment.[71]

Other medications used to target symptoms of depression include antianxiety medications, antipsychotic medications, mood stabilizers, and sleep aids. A detailed discussion of how these medications are used alone or in combination with other medications to treat depression is beyond the scope of this chapter. Suffice it to say that there continues to be as much art as science in finding the right medication to treat mood in any given individual.

Electroconvulsive shock therapy (ECT) is also an effective treatment for those depressed patients who fail to respond to more conventional treatments. Reported response rates are as high as 90 percent in some studies.[72] However, limitations associated with ECT include high relapse rates as well as memory impairment.[73] It is also still associated with significant stigma, in part related to film depictions of this kind of treatment. ECT serves the important purpose of providing relief of suffering in cases where no other treatment type has been effective.

The future holds promise for other new and exciting treatments for depression, from new medications to novel somatic interventions. A medication that works as a glucocorticoid receptor antagonist, RU486 mifepristone, may be useful in psychotic depression.[74] CRF receptor antagonists are also being explored.[66] In addition, truly experimental treatments that bypass medication and attempt to target the brain directly are also being studied, from transcranial magnetic stimulation to vagal nerve stimulation.[75]

Psychosocial Models and Treatments

In addition to the biological models discussed above, multiple psychosocial models have been advanced to explain the causes of depression. In this section, we discuss the general role of stress as a contributor to depression as well as cognitive, interpersonal, and psychodynamic theories and their related psychosocial treatments.

Stress and Depression

One of the more consistent findings in the literature is that there is a strong association between stressful life events and depression.[76] That said, the relationship is likely complex and inconsistent with a simple causal model.[11] Furthermore, the concept of stress is in and of itself complex. For example, with respect to depression, do a series of minor but unrelenting stressors have the same impact on one's mood as one circumscribed but intense stressor? Some data have revealed that approximately 50 percent of depressed individuals experienced a severe stressor prior to onset.[77] While these data suggest that stress may be an important risk factor for depression, they also allow for other explanatory factors. Many current theorists have dealt with the complexity of the stress-depression relationship by at least partially adopting a diathesis-stress perspective. From this perspective, individuals have varying degrees of vulnerability (diathesis) to an illness. When coupled with a certain level of stress, this vulnerability may give rise to the actual illness. This relationship is also likely quite nuanced. For example, is a high degree of vulnerability plus a severe stressor required to produce depression, or is one significant component sufficient?

Furthermore, individual differences on other psychological levels may interact with stress and depressive response. For example, in a recent prospective study, Constantino, Wilson, Horowitz, and Pinel found that stressful life events predicted depression in college students.[78] However, this relationship was moderated by a type of self-organization. That is, people who perceived strong distinctions between their different self-aspects were less likely to develop

depression in response to stress when compared to people who had a lot of overlap in their self-representations. These findings were discussed in terms of Linville's notion of spillover.[79] That is, for people who have more distinctive self-aspects, it is less likely that any negative affect associated with one aspect (in response to a specific stressor) will spread, or spill over, to another. For example, a man may have representations of himself as a father, an employee, a little league coach, and a choir member. If this man perceives himself differently in each of these roles, then there would be less likelihood that a stressful event in one domain (e.g., getting fired) would spill over to his functioning as a father, coach, and choir member, thereby protecting him against a significant depressive response. If, however, this person tended to see himself very similarly across all domains and all of these self-representations were closely associated in memory, his getting fired may be more likely to permeate all domains. In this case, he may see himself as a general failure as an employee, father, coach, and choir member, thereby increasing the risk of a significant depressive response. Thus, a specific type of self-organization (i.e., low overlap among self-aspects) may be a protective factor for depression.

Cognitive Theories and Treatment

Since Beck first articulated his pioneer cognitive model of depression, there has been an expanded (and in many cases predominant) focus on cognitive processes as they relate to the onset, course, and treatment of depressive experiences.[80, 81] According to Beck's landmark theory, negative thinking lies at the core of depression, with the rationale that a person's behavior and affect are determined mainly by the way in which they structure, perceive, and understand the world.[81] From this perspective, it is not the external situation that determines how a person feels but the manner in which the situation is construed or appraised. More specifically, depressed individuals tend to have negative and pessimistic interpretations of themselves, their world, and their future—what Beck refers to as the *cognitive triad*.

Also according to cognitive theory, negative thinking has multiple levels. The first level involves *automatic thoughts*, which are posited to color negatively a person's perceptions of many or most situations or stressors, thereby enhancing or maintaining a depressed mood. People's thinking at this level is often characterized by *cognitive distortions*, or faulty information-processing. For example, depressed individuals tend to exhibit *black and white thinking*, for example, failing a test and deducing that you are a horrible student across all subjects or a failure across many other domains. A second level of thinking reflects *intermediate beliefs*, which reflect a deeper level of attitudes, assumptions,

and rules that people apply to their self-perception. For example, a depressed person may assume that the only way that he or she will be liked by others is to work extremely hard in order to perform perfectly. Thus, when this individual does not live up to this impossible rule, resulting negative emotions are likely to occur. And finally, the deepest level of thinking reflects an individual's most central or *core beliefs* about the self. These beliefs, which often stem from previous experiences, are at the most fundamental level and tend to be global, rigid, and overgeneralized. Such organizing self-schemas are often regarded by the person as absolute truths, though they may be so fundamental that the person rarely articulates them—even to himself or herself. For example, a depressed man who had rejecting or invalidating parents may have developed a defectiveness schema characterized by a strong belief that he is bad, unwanted, or inferior and that he would be completely unlovable to significant others. As a result, this individual may be prone to interpreting the behavior of others as being consistent with this belief. In other words, he may be hypersensitive to perceived criticisms, rejections, or blame. In turn, these perceptions are likely to strengthen the organizing self-schema of being unlovable, thereby reinforcing the depressogenic state. Given people's inherent drive for consistency, early maladaptive schemas or core beliefs tend to fight for survival by way of these persistent feedback loops.[82]

Another variation on cognitive approaches to depression is Seligman's learned helplessness theory.[83] Seligman postulated that at the center of depression lies a learned feeling that our actions to change a given stressful situation are out of our control. Thus, depressed people believe that there is nothing that they can do to relieve their suffering or to bring gratification to their life. In short, these individuals believe that they are "helpless," and that there is nothing that can soothe their pain. Such individuals will subsequently adopt this passive and helpless stance across most or all life circumstances.

The learned helplessness understanding of depression has been revised in order to better account for why some people become helpless and depressed when they experience negative events while others do not. This revision takes into account the role of *attributions*, or ways in which a person explains what happens to them.[84] It is an example of a diathesis-stress model, where the diathesis is a pronounced tendency toward negative explanations for events and the stress is the experience of negative life events. According to this perspective, a depressed person will attribute the occurrence of negative life events to personal deficiencies that are internal, stable, and global. Consider two individuals who apply for a job, receive an interview, and are not offered the position. Individual A attributes not receiving the offer to his own (internal) unworthiness ("I did not receive the job offer because I am incompetent") and views

the absence of a job offer as due to factors that are stable ("I'll never have the skills to get a good job") and global, that is, affecting many areas in his life ("I am a failure as a person and will not succeed in any area"). This individual will assume that negative outcomes will continue to occur in the future, that he will be powerless to prevent them, and that the pattern signifies general personal unworthiness, leading to depression. Individual B attributes not getting the job to situational factors, specifically, a lack of fit between his particular set of skills and the job requirements ("I did not get the job because it required knowing a computer language that I have not had the opportunity to learn yet"), views the problem as correctible, that is, temporary ("I am going to take a course to learn the specific skills that I need so that the next time this comes up I will be prepared"), and does not view the lack of a job offer as a reflection on his sense of self-worth. Individual B would not necessarily expect negative events to continue unabated, would feel a greater sense of control over his future, would not feel a pervasive sense of unworthiness, and would be far less vulnerable to depression than individual A.

Although other cognitive models exist, all models assume that negative cognitive processes play a significant role in the etiology of depression. Thus, cognitive approaches to treatment have developed from this assumption.

Over the past few decades, the emergence of cognitive therapy (CT) has been one of the major developments in the treatment of depression.[4] In fact, CT is a well-established, empirically supported treatment for depression that is widely recognized as one of the most effective psychosocial treatments available.[86] CT is at least as effective as other psychosocial or pharmacological approaches[87] and may be superior in reducing the rate of relapse and recurrence.[88]

The hallmark of the cognitive therapy (CT) approach is to explore how people's ways of thinking may be contributing to their difficulties. A primary goal of the cognitive therapist is to work collaboratively with his or her patients to assist them in developing new—and more accurate and adaptive—perspectives of self, other, world, and future. While there is a multitude of techniques,[85] the main principle is that events and experiences can be interpreted in many ways. Thus, CT therapists help patients to identify irrational and maladaptive automatic thoughts, cognitive distortions, intermediate beliefs, and eventually core views of self. Therapists also help patients to link their thoughts with their emotions and then help patients to challenge their distorted thoughts and to consider new ways of thinking. Cognitive therapists encourage patients to become scientists who treat their thoughts as hypotheses rather than as established facts and to learn to see that perception can change mood. In many cases, behavioral strategies complement the core cognitive strategies. For example, therapists will encourage patients to gather evidence concerning their beliefs, to test alternative

viewpoints about a situation, and to try new methods of coping with situations. CT is a time-limited, structured, problem-oriented, and educational approach, in which the therapist is often active and directive. The approach is intended to have a here-and-now focus, though such a focus is certainly informed by one's history.

Interpersonal Theory and Treatment

Departing from cognitive approaches, interpersonal models of depression view relational difficulties as the core problem in depression. This model rests on many of the assumptions originally advanced by Sullivan[89] and Meyer[90]—the founders of the Interpersonal School of Psychology. From this framework, depression is understood as the result of three intertwined processes: neurovegatative symptoms and depressive affect, social and interpersonal relations, and personality and character problems.[91] On the one hand, interpersonal stressors are purported to play a crucial role in the onset of depression, and on the other hand, depression negatively impacts interpersonal relationships. The belief in this reciprocal interaction between mood and life events is at the core of the interpersonal theory of depression. Following from this model, Klerman and colleagues[92] developed interpersonal psychotherapy (IPT) specifically for the treatment of depression. IPT highlights the psychosocial and interpersonal underpinnings of depression and focuses mainly on current relationships and relational patterns. Within the IPT framework, improving interpersonal relationships is viewed as the vehicle for resolving depressive symptoms. One or several of four main areas of interpersonal difficulties can be the focus of IPT. These areas include grief, interpersonal role disputes, role transitions, and interpersonal deficits.[91] IPT proposes specific goals and strategies for the treatment of depressed patients with respect to each of these interpersonal problems.

Grief is the focus of treatment among patients for whom the onset of the depressive episode is connected to the death of a loved one. The goal of the therapy with these patients is to assist the healthy mourning process and to help them reestablish activities and relationships to replace what has been lost. For interpersonal role dispute, depression is related to a relationship in which the individuals have nonreciprocal or conflicting expectations of each other. In this case, the main goal of treatment is to identify the dispute (which may be covert), to develop a plan for change, and to modify expectations or faulty communication to resolve the interpersonal problem. In some cases, dissolution of the relationship may reflect the most adaptive outcome. The third problem area, called "role transition," applies to patients who are going through a major life change, such as retiring or starting a new job, moving to a new city, or being

diagnosed with a medical illness. It is presumed that these patients become depressed because of difficulties meeting the demands of the new role or their inability to relinquish the old role. The goals for therapy with patients going through a "role transition" include mourning and accepting of the loss of the old role, developing a more positive evaluation of the new role, and restoring self-esteem by developing a sense of mastery in the demands of the new role. The last problem area is referred to as "interpersonal deficits." It is a reserved for patients who do not fit into any of the other three areas, show no evidence of an acute precipitant of depression, or have a long history of impoverished or unsuccessful interpersonal relationships. The goals for the treatment of patients with "interpersonal deficits" are to reduce the patient's social isolation and to encourage the formation of new relationships. Similar to CT, considerable research supports the effectiveness of IPT to the point that it is also considered a well-established, empirically supported treatment for depression that produces outcomes comparable to other psychosocial and psychopharmacological approaches.[93]

Psychodynamic Theories and Treatment

Since the beginning of the 20th century, a variety of psychoanalytic writers have attempted to explain and to understand the challenging concept of depression. Psychodynamic models of depression have typically focused on the emotional impact of childhood experiences on a person's perception of self and significant others. Freud described the onset of depression as triggered by the loss (either in reality or fantasy) of someone important in the person's life.[15] Different from normal grief or mourning, Freud suggested that the melancholic or depressed person undergoes an important loss of self-esteem. Abraham viewed the state of adult melancholia as stemming from a current disillusionment in love, which is perceived by the depressed person as a repetition of an early traumatic experience in which the person had a severe injury to his or her self-esteem.[94] Bibring emphasized the difficulty in self-esteem regulation as a key issue in depression.[95] According to this model, low self-esteem stems from the existing gap between the person's current self view and his or her aspirations as to whom they would like to be (ego ideal).

The primary focus of psychodynamic psychotherapy is on the gradual understanding of the person's depressive symptoms with respect to an underlying core depressive dynamic. The main treatment goal is for the person to gain insight into the ways in which these dynamics have become embedded in the person's perception of himself or herself as well as in relationships with others. As summarized by Busch, Rudden, and Shapiro, "Gradually, the patient

begins to recognize the contexts that tend to elicit depression, to understand what is happening internally during those times, and to feel more in control of the depressed feelings" (p. 31).[96] While many traditional psychoanalytic treatments are lengthy (possibly lasting years), briefer psychodynamic treatments have also been developed (ranging anywhere from 5–40 sessions) that emphasize increased therapist activity during sessions and a limited central focus.[97] Although widely used with depression, psychodynamic treatments continue to have a limited evidence base relative to CBT or IPT. This lack of evidence does not necessarily imply that psychodynamic treatment is ineffective for depression but rather that the number of rigorous effectiveness studies remain limited at the current time.[93]

In conclusion, several psychosocial treatments have been shown to be at least as effective as psychopharmacological approaches to depressions, with CBT and IPT having the most impressive empirical support. In the case of preventing relapse or recurrence, there is some evidence that CBT may have an edge over other approaches. Furthermore, when it comes to chronic depressions, there is growing evidence that the combination of antidepressant medication and psychotherapy is the most effective strategy.[10]

SUMMARY

In this chapter, we have summarized contemporary information and perspectives regarding the clinical features, burdens, theoretical models, and treatments associated with adult depression. Categorically defined as a mood disorder within our current psychiatric nomenclature (though not without controversy), depression is a highly prevalent and often recurrent psychiatric condition that affects about twice as many women as men. Furthermore, there is substantial comorbidity among depression and other psychiatric and medical conditions. Whether on its own or in connection with other problems, depression gives rise to significant personal, societal, and economic costs and is expected to soon become the leading source of disease burden in established economies (it already ranks second).

With respect to understanding depression, multiple theoretical models have been advanced. The models all have corresponding research literatures, and many have treatments that stem from the particular theories. In the current chapter, we reviewed prominent biological models (e.g., genetics, biochemical change) and treatments (e.g., antidepressant medications, ECT) as well as psychosocial models (e.g., cognitive, interpersonal) and treatments (CBT, IPT). While significant progress has been made in understanding the mechanisms involved in the onset and course of depression, many questions remain.

Depression is a heterogeneous illness, which leaves much to be discovered regarding the essential features and explanatory mechanisms for different subtypes. What can be said with a fair degree of certainty is that the cause of depression is multifactorial, with many researchers accepting some semblance of a biopsychosocial (nature-nurture) perspective.

Despite our still rather limited understanding of depression and its causes, we have actually come a long way with regard to treatment. Episodes of depression can be treated fairly effectively (and comparably) with antidepressant medications or psychosocial therapies. In some cases (e.g., chronic depression), a combination of medication and psychotherapy seems most efficacious. For severe and treatment resistant depressions, ECT can often be effective, at least in terms of providing immediate relief from previously intractable symptoms. While there is an abundance of data speaking to the general effectiveness of psychopharmacological and certain psychosocial interventions (CBT and IPT) for depression, the fact remains that improvement rates in some studies remain fairly modest, with some patients dropping out prematurely, some achieving only partial response, and others not responding at all. Furthermore, even when patients do respond to a course of treatment, they remain vulnerable to future depression. As we have highlighted in this chapter, depression is a chronic condition that often requires long-term or at least episodic care. Thus, even though depression is one of the most studied psychological conditions, much work remains to be done to improve our understanding of its basic processes and to improve our interventions. And as argued by Arnow and Constantino, it is not enough to think simply about improving our ability to affect short-term symptom reduction.[10] Rather, it is imperative to take into account the chronicity of depression as well as its considerable functional impact on work and social function. Thus, effective treatments need to target long-term gain, relapse prevention, and areas of functioning beyond symptom-reduction. Fortunately, and appropriately, depression remains a high basic and applied research priority.

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The Will to Die

Viola Mecke

Contentment is a stranger to the suicidal person. Striving for an elusive sense of inner peace brings only a weariness of life. Hope is murdered within the soul as problems loom larger with each day. Gratitude for life eludes the person. Meaningfulness in life is drowned under a dark sea of discouragement. Vital connections to others are buried beneath disappointments, and longed-for love seems unavailable. It is a bitter unquantifiable hunger.

Suicides arise from a "psychache"—a suffering in the mind that makes living appear desolate, dark, and dismal.[1] The suicidal person is driven by mental distress that is perceived as unbearable, deemed intolerable, and felt unacceptable. This mental distress is a bankruptcy of the soul, and solutions seem unavailable. Sometimes death has been an obsession from early childhood, a mental dream that is fantasized and then acted out for all to see. To others, the suicide seems a sudden and unreasoned act.

Sylvia Plath writes, "It is a love of death that sickens everything. . . . I lose life after life."[2] Death seems to gradually take over the thoughts and finally the actions of suicidal persons.

Edwin Shneidman explains that suicide is "a multifaceted event and those biological, cultural, sociological, interpersonal, logical, conscious and unconscious, and philosophic elements are present in each suicidal event."[3] These extenuating factors lay behind any suicidal act, and he concludes, "I believe suicide is a drama of the mind, where the suicidal drama is almost always driven by a psychic pain of the negative emotions—what I call psychache."[4] While each of these factors is considered important, they do not provide an understanding of the forces that drive the self-killing.

Suicide has stolen the lives of many people throughout the centuries and throughout the world. Suicide is a Latin word composed of three parts: *sui*, meaning the self, *cide*, to cut, and *caedere*, to kill; and then *suicidere* became the word for suicide.

The person who kills himself is often referred to as a victim. True, he is a victim of homicide, a victim of his own mind and actions. However, the word may not really fit, for the *Oxford English Dictionary* states that a victim is "a person who is put to death or subjected to torture by another. Victims are subject to "profound, ruthless and damaging forces from outside themselves."[5] The torture of the suicidal mind resides within itself. Even so, torture is often felt by suicide victims. That is, some external person is often the instigator of another's inner distress, either consciously or unconsciously. The wishes of these instigators become felt demands that the suicidal person destroy his life.

WHO ARE THE VICTIMS?

Death by illness or accident brings sorrow to the survivors. The loss of a life by suicide brings a grief that cuts through the soul of the survivors. In the year 2000, the National Institute of Mental Health reported that suicide was the 11th cause of death in the United States, the 8th cause of death for all U.S. men, and the 19th cause for U.S. females. White men accounted for 73 percent of all suicides and 80 percent of all suicides using firearms. Approximately 1.3 percent of all deaths in the United States in 2000 were from suicide.[6]

It is a sobering fact that suicide causes more deaths than homicide; there are five suicide deaths for every three homicides. Further, there are twice as many deaths due to suicide than deaths caused by HIV/AIDS.

Women attempt suicide three times as frequently as men, but men are four times more likely to die by suicide than women. This is related to the fact that men use firearms more frequently, although the use of guns is increasing among women.

Suicide rates are highest among whites and second highest among American Indians and Native Alaskan men. In all ethnic groups, the frequency of suicides rises sharply for men over 60 years of age. At all ages, more white men kill themselves than black men, and fewer black females commit suicide than white females.

In 2005 the international World Health Organization estimated that approximately 1 million people will die by suicide every year and it is the third leading cause of death for both sexes. The worldwide mortality rate of suicide is 16 per l00,000 persons, or one suicide every 40 seconds. The number of suicides appears to be increasing; there has been about a 60 percent increase

in suicides worldwide in the last 45 years. Fifty-five percent of suicides occur before 44 years of age. Forty-five percent of suicides occur after the age of 45, with a disproportionate number occurring after 65 years of age. Traditionally, suicide rates have been highest among elderly males, but the rates for young people have increased so much that youth are now the group at highest risk in a third of all countries.[7]

In the United States, it is estimated that there may be 8 to 25 attempted suicides for every suicide death, suggesting that between 250,000 and 790,000 persons actually attempt to kill themselves every year. The National Center for Injury Prevention and Control in the United States reported that 132,353 individuals were hospitalized following a suicide attempt in 2002 and another 116,639 were treated in emergency departments of hospitals and released. The primary method suicide in the United States is with a gun, and about 69 percent of all suicides have involved the use of firearms. Suffocation with gas (carbon monoxide) or plastic bags, poisoning, and jumping from high places rank next in frequency.[8]

In the past, most suicides occurred by jumping or falling. In ancient Greece, Sappho, who was widely acknowledged for her love poems, was abandoned by her lover, Phaon.[9] She then leaped from the Leucadian Cliffs, dressed in wedding attire, praying to the gods to spare her life. High places continue to attract many suicidal people. A prime setting in the United States is the Golden Gate Bridge in San Francisco. Over a thousand persons have leaped to their death from that bridge. Beachy Head in England, which has a sheer drop of 550 feet to the sea, is the site of even more suicides per year than the Golden Gate Bridge.[10] Other places include the Maiden Rock of the Sioux Indians, craters of certain Japanese volcanoes, some waterfalls on the Island of Bali, and almost any bridge or cliff available to these disheartened souls.

To kill one's self can be done in many ways, psychically as well as physically. Murder of the soul happens sometimes just by giving up awareness of one's desires or pleasures. Other times murder of the self can be seen in accidents, gambling, alcohol and drug abuse, and other self-destructive actions.

SUICIDE THROUGHOUT THE LIFE SPAN

Suicide in Children Ages 1–10

Case 1: Tommy

It seems unbelievable that children under the age of 10 can think about killing themselves, let alone succeed to suicide. Yet they can and do. I had an experience with a little boy that sobered and saddened me. Tommy killed himself when he

was five years old. I first saw Tommy when he was nine months old. He was brought to the clinic by his parents for an evaluation of his developmental status. The father stated that Tommy was retarded and should be placed in an institution for disabled children. He emphasized that Tommy certainly did not belong in their home, not with the older boy, age six, who was so bright and intelligent.

Tommy was an appealing, even beautiful baby with a non-expressive look in his eyes. Sitting on the floor in my office, he did not look at his parents, the toys, or me. His parents left the room while I carried out the evaluation. Tommy did not acknowledge their leave-taking, not by a look or a change of expression. Gradually Tommy warmed up to me, would touch the toys, and then responded to the playful challenges of the evaluation material. Surprisingly, he scored well within the levels of normal development in memory, in fine motor skills, and in following simple instructions.

Thinking the parents would be pleased, I shared the results of the evaluation with them. The mother, a drably dressed and seemingly depressed woman smiled wanly. Tommy's father became dour and grumbled that something must be wrong.

The parents returned when Tommy was 18 months of age and again when he was about 30 months old. Each time Tommy displayed appropriate physical and intellectual development for his age, albeit the fact that he had limited emotional reactions. At 30 months of age, he was entered into the nursery school of the clinic for more extensive observation. Tommy was at first quite shy but soon ran eagerly into the schoolroom and began to play with the other children as well as with the toys. Three months later, his parents withdrew him.

At four years of age Tommy swallowed his mother's psychotropic pills, which she kept at her bedside. He was rushed to the hospital where the emergency team was successful in keeping him alive. A year later, he again took his mother's pills, still kept at her bedside. This time Tommy was more successful, for he could not be resuscitated. He had killed himself.

The constant message that Tommy had heard from his father was that he was unwanted, that he should not have been born, and that, if he took the pills again, he would die. The hostile rejection by his father and the severe failure of the mother to protect him gave Tommy the loud message that he should be dead. He did what his father and mother wished. He made himself dead.

Certainly the question of whether or not Tommy knew what being dead meant can be asked. We do know that to be dead meant to be "gone" for Tommy. It was a certainty that he was unwanted and that his father would like it if he were not there. Tommy accommodated his father's wish. The quality of the attachment of his parents toward Tommy failed to foster his life; his

father had a malevolent attachment, and his mother had, at best, an ambivalent attachment to him. These non-supportive attachments are at the base of many a suicide.

In this case, and in other cases of severe physical or emotional abuse, the child lives in fear and tension. Always in danger, the child becomes hypersensitive. When withdrawal becomes the safest posture, intellectual as well as the emotional development is impaired. The child accepts the hostility coming from others and learns to hate himself.

Tommy presents an unusual case, but there have been many other instances when a child set about to kill himself or herself.[11] While there are not many statistics on self-killing under the age of 10, the National Center for Injury Prevention and Control reported in 2002 that there were at least 20 deaths by suicide for these ages.[12] Most reports of childhood suicide come from clinical studies, so many may be unreported.

For children ages 10–14, the known suicide rate is about 248 deaths per year. Within this number, there are three times as many boys as girls, a ratio that is typical for older ages.

The inner turmoil of the child may be expressed with unexplained irritability, inability to concentrate, anger, or rebelliousness. In one study of children at risk for suicide, it was found that "suicidal children had high levels of psychomotor activity, an intense preoccupation with death, and parents who had suicidal ideation."[13] A different reaction was seen in Tommy, with his subdued withdrawal that left him only a depleted inner and outer world. His traumatic dis-attachments occurred at such a young age, there was little energy left for expression of any anxiety. The risk of suicide increases if the child is depressed or there is unalleviated stress for the child in the home.

Another sensitive indicator that suggests suicide may be on the mind of the child arises from an unexplained experience with death, such as a parent's death, whether by illness, suicide, or abandonment. A frequent reaction for a child is guilt over the loss of the parent, if the child assumes the death came about because of his or her own anger or badness.[14] The guilt arises from an ambivalent attachment to and an ungratified need for security. Sometimes the child may so yearn for the parent's love that he or she expresses wishes to join the parent by death—and thus gain the affection that is longed for. In this case, the child introjects death as a solution for loss and a means to quiet guilt. It is important to note that the introjection is not an identification with the person who died but with the action of dying itself.

Later in life, the person may kill himself or herself in an anniversary reaction to the death. Anniversary reactions occur when an adolescent or adult kills himself or herself during a time symbolic of the death, whether at a similar age, a similar

time of the year, a similar incident, and so forth. To avoid such trauma lingering in the psyche, it is imperative that the child receive nurturance and security following the death and be provided sufficient emotional care to relieve the turmoil that may permeate the child's psyche. Without these assurances, the sense of being abandoned and the pull toward death may supersede other defenses of the child.

A further sensitive sign of a possible suicidal intention is the child's preoccupation with death. Normally, children of five to seven years of age are curious about death and have many questions about it. When the questions are answered satisfactorily for the child, the curiosity is abated. However, when the theme of death persists in the child's reality, in fantasies, or in play, some psychological intervention is advisable. The child needs and deserves the emotional support and intellectual understanding given for his or her appropriate age level to free him or her from the anxieties provoked by the loss.

An additional sensitive indication concerns the child who, through his or her own illness or accident, comes close to death. This child has suffered a primal experience of death, at least on the unconscious level, that keeps him or her anxiously fighting death and psychologically fighting to live. This psychological suffering is also seen in instances of severe physical or emotional abuse, in which the child's psyche is fraught with fears of being killed and of dying.

There are not that many children who kill themselves at this young age; when it happens, adults are astounded. For the youngster, it was a life without hope.

Suicide during Adolescence and Young Adulthood

Case 2: Sonny

Fifteen-year-old Sonny left a note for his parents: "To Mom and Dad, I know your life will be easier without me. Love, Sonny." The next morning his parents found the note when they opened his bedroom door to awaken him for school. There he was, swinging on the end of a rope, dead. Sonny's parents recalled that he had been unusually sweet the night before. He kissed them goodnight, told them that he loved them, and instructed his younger brother and sister to be good to their mother and father.

Sonny was a good boy. Intelligent and excelling at school, he seemed motivated for college and a profession. He was a quiet, studious child who never was into trouble—no smoking, drinking, or drugs. Sonny's parents were professional persons with a marriage that was contentious, competitive, and unsatisfying. Not only were the parents driven to achieve, they placed high expectations on the three children—Sonny (age 15), Kay (age 12), and Ron (age 8). To others, the family appeared as a cohesive, normally functioning family. But no one was happy.

Sonny was an unwanted child, conceived before the marriage of his parents. His mother was in graduate school at that time and was determined to continue her studies. After Sonny's birth, she left his care to babysitters and his father. Sonny grew up hungry for his mother's nurturance and love. She described him as a child who was always clinging to her. Sonny had been a lonely child, without friends. In high school, his loneliness increased, but his mother assured him that was to be expected. He killed himself during his sophomore year.

Sonny's suicide could have been prevented. From birth, Sonny suffered from the lack of a secure, nurturing bond with his parents. He could only react to his mother's rejection and his father's benign neglect. He suffered the cold, inner isolation that resulted from the lack of a warm, responsive mother who would provide a life-giving mirror of himself. There was no substance, no picture of himself in his inner being. That is, without the introjection of a constant, life-giving image of himself reflected back from another, his inner sense of self was empty, a nothingness. By adolescence, the inner emptiness was too much to bear, and death seemed more giving that life.

The attachment of his mother to Sonny was a negative attachment, if not actually a malevolent one. Andre Green described this type of mothering quite aptly. He wrote, "The non-presence of the mother becomes an object, if you will, one tenaciously occupying a central position in the child's psyche. Non-existence is paradoxically therefore the most intense psychological experience of the child."[15] The failure of attachment is often found in suicidal cases.

Sonny is one of a multitude of youth that kill themselves, youth who are unable to face the future with hope. Suicide is the third leading cause of death for adolescents, following unintentional injuries and homicide. In 2003 the suicide rate was 8.2 deaths per 100,000 teenagers age 15–19. There were five times as many males as females. The rate increases to 12.8 per 100,000 for 20–24 years of age with seven times as many males as females killing themselves.[16]

Adolescence is a challenging, often stressful period. It brings many changes for the young person—within the self, in the family, and in the sociocultural setting. Periods of emotional vacillation are frequent, and mood swings are normal. As self-awareness increases, it stimulates changes in the self-concept and heightens the perception of social relatedness. When the stress overwhelms the psychological strengths, it may damage the perception of the person and his or her relationships with others. The young person may pull away from stress through rebelling, running away, or drowning himself or herself in alcohol or drugs—all are a kind of self-demolition. When fear and anxiety are too oppressive and he or she pulls back into himself or herself, the withdrawal can be a foreboding of a depressive reaction; the ultimate withdrawal from inner turmoil is death, or suicide.

The special circumstances and emotional signs that can be used to identify those adolescents who may be prone to suicide include social isolation from family or friends, a dearth of personal attachments, and the lack of coping skills for everyday problems. The adolescent's most intense need is for a warm connection to others; and if the adolescent does not find it with parents, he or she seeks it with friends.

Suicide in Adulthood

Shneidman writes, "What is suicide but a damp and dismal November in the mind?"[17] Suicide marks a failure in the struggle for life and an inability to solve the problems that arise. The rate of suicide for the ages of 30 through 70 remains fairly stable, averaging about 6.97 deaths per 100,000 persons. It exists as a major health problem throughout the world. The reported rate of suicide varies from 6.4 per 100,000 in Mexico to 15.1 in the United Kingdom and 82.5 in the Russian Federation. The World Health Organization reports that there is about one suicide every 40 seconds and an attempted suicide every three seconds.[18] These statistics are startling and reveal that for many, inner distress makes death more inviting than life. The unsuccessful attempts may be tests that permit some chance of living. Among other tests-to-live are such suicidal behaviors as chronic alcoholism or substance abuse, pathological gambling, death-defying sports, reckless driving, playing roulette, and self-mutilation.[19]

Clinicians report that about 90 percent of suicidal persons merit the diagnosis of depression, bipolar disorder, or schizophrenia. Very often the diagnosis is given after death and may provide some comfort for the survivors but provide little insight into the act. The internal darkness of the suicidal person remains unexplained except that death was more inviting than life.

Situations that lead to self-killing represent personal conflicts and problem situations that appear common enough. Yet these persons feel problems are not resolvable and life cannot go on. The problems include (1) personal situations such as interpersonal losses or conflicts, a sense of isolation, a family history of suicide, a childhood history of physical or sexual abuse, or serious illnesses; (2) situational events with shame over an event, financial difficulties, or job problems; (3) personality factors such as hopelessness, violence, aggression, low self-esteem, depression, or preoccupations with dying; and (4) neurochemical factors such as a low cerebrospinal 5-hydroxyindolacetic acid level, low cholesterol levels, and physical illness.

The following excerpts from a few suicide notes illustrate some last thoughts of the suicidal person:

> "All I do is suffer each and every day. Every moment is pain or numbness. How long can one go on without pleasure?"[20]

"It is a love of death that sickens everything."[21]

"Death, you lie in my arms like a cherub, as heavy as bread dough."[22]

"I have a feeling I shall go mad. I cannot go on longer in these terrible times. I shant recover this time. I hear voices and cannot concentrate on my work."[23]

"I must end it. There's no hope left. I'll be at peace. No one has anything to do with this."[24]

"When all usefulness is over, when one is assured of an unavoidable and immanent death, it is the simplest of human rights to choose a quick and easy death in place of a slow and horrible one." [25]

"Everyone seems so happy and I am so alone. . . . I'm so tired and lonely."[26]

It is apparent that each of these notes speaks of the agony of the soul, whether it is loss of love, hopelessness, illness, loneliness, or even revenge.

There are some indicators of a potential suicide that can alert others to the tragic action and apply particularly when more than one factor is present.[27] These include (1) a previous attempt or fantasized suicide; (2) anxiety, depression, exhaustion, or pervasive hopelessness; (3) availability of lethal methods; (4) expressed concern for the effect of suicide on family members; (5) preparation of a will and resignation after a prolonged, agitated depression; (6) a life crisis, such as illness or mourning for a loss; (7) a family history of suicide.

Suicide in Older Adults

How can we escape from you, life, except through death?

Our sorrows are endless. Endure? Escape?[28]

Death creeps closer with age. People think more often of dying as they become older and face the challenges that aging brings. Suicide is a way of hastening inevitable death. Although individuals over 65 make up 13 percent of the U.S. population, they account for 18 percent of all suicides. A demographic group with one of the highest rates of suicide is white men age 85 or older; there were 59 deaths per 100,000 in 2002 for this age group. This is more than five times the national rate of 10.6 per 100,000.[29]

Depression besets many an older adult.[30] It is estimated that about 2 million Americans age 65 and older have a depressive illness. Another 5 million have subsyndromal depression with some symptoms but not enough to meet the criteria for a full depressive disorder. Seven million of 35 million Americans over 65, or 20 percent, can be identified as depressed. Depression may occur

concomitantly with a serious illness or may be a reaction to an illness. Since depression may be a forerunner of suicide, it is important that it be recognized and treated although the signs are often difficult to identify, even for physicians. While despair of life seems to increase in the aging population, depression is not a normal part of aging. The normal emotional expressions of sadness, grief, loss, and passing mood states are not indications of depression. Only when the sad, hopeless feelings become chronic and interfere with the individual's ability to function can a diagnosis of depression be considered.

The reasons for the increase of suicide in older aged persons are sad but understandable. Life becomes more difficult physically, psychologically, and socially as the older person is faced with more adjustments than before. Normal aging itself brings physical changes and a decrease in physical energy. Changes in social roles, retirement from employment, and economic worries loom larger, especially with burgeoning costs of medical care. Independence is lost, and a reliance on others becomes necessary. The lifelong accumulation of stress takes its toll and diminishes coping skills. Older people may find a weakening of the ability to handle anxiety as their ego becomes wearied and the ability to control their own lives lessens. Fears brought on by dependency and illnesses overshadow the pleasure of living. Despair may accompany the serious illnesses of age—such as heart diseases, stroke, diabetes, cancer, Parkinson's disease, and various forms of dementia.

Mostly, loneliness is an important factor. Loneliness as stark as winter cold and unbearable for many overwhelms the person as he or she is beset by loss of a spouse, family, and friends, and with them, the loss of affection and intimacy. The meaningfulness of living deliquesces.

A gradual fatigue of the ego occurs, and the social world becomes less appealing as capabilities decrease. The future holds the picture of aloneness, of illness, and of death. For many, death becomes a welcome friend. Sometimes sufficient aggressive energy remains to enable older people to take death into their own hands.

I remember the death of Bruno Bettelheim, a renowned psychotherapist for seriously disturbed children. Bedridden in a nursing home, beset by strokes, he nevertheless did not want to waste away to death. He saved some sleeping pills and then one night placed a plastic bag over his head and smothered himself to death. I compare this with my mother who also was in a nursing home for the last three months of her life. She was comatose for much of the day, but when I asked her about dying, she thought a minute and responded, "I want to die the natural way." Her sense of herself and her ego was strong enough even in the last couple days of her life to choose to experience a "natural" death. Her attachment to life was secure.

THE MORALITY OF SUICIDE

The dialogue among philosophers, social scientists, ethicists, mental health professionals, sociologists, and theologians has been continuous throughout the known history of mankind. The questions seem to focus on the following: (1) What is suicide? (2) Does a person have a right to take his or her own life? (3) Is it in accord with the rules of nature to kill one's self? (4) What is the damage incurred by others and by society with suicide?[31]

Suicide is generally defined as any self-caused death, whatever the reasons or means of self-killing. But, consider, if suicide has an ulterior motive, is it then suicide? If killing one's self has a different reason other than death itself, is it suicide? What if the suicide has the purpose of relieving physical pain, or release from psychological anguish, or revenge against or punishment of another, or martyrdom, or the service of apolitical or religious cause, or protection of someone else, and so forth? For our purpose, suicide is considered a voluntary death committed at one's own volition in a manner chosen by that person.

Philosophical discourses about suicide in our Western world often begin with the writings of Plato. Plato was convinced that suicide was wrong and suggested that individuals who commit suicide should be forbidden an honorable funeral and be buried without recognition in an isolated spot.[32]

Aristotle condemned suicide as an offense against not only the self but also against society. A suicide damages the welfare of the community because of the loss of a contributing member. To Aristotle, suicide is an act of cowardice that reneges on the responsibilities of life.[33]

The precepts governing suicide in ancient Greece were clear: "Whoever no longer wishes to live shall state his reasons to the Senate, and after having received permission shall abandon life. If your existence is hateful to you, die; if you are overwhelmed by fate, drink the hemlock. If you are bowed with grief, abandon life. Let the unhappy man recount his misfortune, let the magistrate supply him with the remedy, and his wretchedness will come to an end."[34]

The Cyrenaic and Epicurean philosophies (ca. 400 B.C.–270 B.C.) encouraged the person to make a decision about suicide without fears of the afterlife. One Cyrenaic, Hegasus, was expelled from Egypt because he successfully persuaded too many young people that suicidal death was preferable to life. Hegasus's attitude foretells the justification of suicide by martyrs who kill themselves for a cause—political or religious.

The Roman approach was more liberal and applauded suicide as an act of honor under certain circumstances. There were many Roman leaders who did

choose to kill themselves; among them were Brutus, Crasus, Gracchus, Cato, Lucretia, Antony, Cleopatra, Nerva, Seneca, Nero, and Calpurnicus.

Attitudes about suicide changed with Christianity. Beginning with Augustine, suicide was a sin for which a person could not repent. Thomas of Aquinas supported Augustine's reasoning based on three principles: suicide is contrary to natural self-love; life is a gift given by God, therefore is sacred; and, as God is the giver of life, God alone can determine how long we should live.

Because suicide was seen as sin, the bodies of those who killed themselves were often desecrated, they were not permitted a burial in the community or church cemeteries, and survivors often lost any claim to the goods and possessions of the person. The traditional Christian view lasted well into the 17th century with few exceptions. Two notable exceptions were Thomas More and David Hume.[35]

In the late 16th–17th century, the rigidity of the Christian view that the devil and the suicidal person were in cahoots was questioned. John Donne, an Anglican bishop, wrote a book entitled *Biathanatos: A Declaration of that Paradoxe, or Thesis, that Self-homicide is not so naturally Sinne that it may never be otherwise*, in which he reasoned that suicide was not contrary to the laws of nature, of reason, or of God, because there is no clear condemnation of suicide in the Bible itself ; because other forms of self-killing were acceptable, such as martyrdom. or wartime killing. Shakespeare included about 52 suicides in his writing.

Present Views of Suicide

Many well-known and seemingly successful individuals from all walks of life have killed themselves, such as Virginia Woolf, Marilyn Monroe, Ernest Hemingway, Sylvia Plath, Anne Sexton, Admiral Boorda, Kurt Cobain, and Freddie Prinz. Morality no longer seems to be the question. In the late 19th and then in the 20th century, psychological sciences were beginning an intensive study of the effect of experiences on human life. The concern about suicide focused on the individual and the circumstances of the suicide. Among notable contributions were the works of Sigmund Freud, as he investigated the conscious and unconscious determinants of behavior. While Freud did not specifically attend to the problem of suicide, his contributions changed the direction of investigations. He wrote,

> There is no need to think such self-destruction rare, for the trend to self-destruction is present to a certain degree in very many more human beings than those in whom it is carried out. Self-injuries are, as a rule, a compromise between this instinct and the forces that are still working against it, and even when suicide actually results the

inclination to suicide will have been present for a long time before in less strength or in the form of an unconscious and suppressed trend. . . . Even a conscious intention of committing suicide chooses its times, means and opportunity.[36]

In the book *Man against Himself*, Karl Menninger dramatically pictured how an individual can be his own worst enemy. He asserted that unconscious motives, as well as conscious wishes, play a significant role in self-destructive behavior—from incidental accidents, to avoidable actions (as self-mutilation), to suicide. Menninger suggested that suicide included three basic elements: "There is the element of dying, the element of killing, and the element of being killed. Each is a condensation for which there exist complexes of motive, conscious and unconscious."[37]

It would be impossible to look at suicide without recognition of the contributions of Edwin Shneidman and his associates. After a lifetime of study, research, and therapy with suicidal persons, Shneidman's contributions have had worldwide reverberations. As a young psychologist, he was sent, serendipitously, to get some information about two patients who had committed suicide. Reading a suicide note left by one patient, he was challenged to understand the factors that led to suicide. He became intensely involved with the problems leading to killing one's self. In 1958, Shneidman, with his associates Norman Farberow, Robert Litman, and others, established the Los Angeles Suicide Prevention Center. It was a multidisciplinary crisis center that focused on providing immediate support and intervention to those persons considering suicide. These crisis centers now exist in most cities and throughout the world and are usually open 24 hours a day, 7 days a week.

His research identified the field of suicidology as an area of study in its own right. Suicide, to him, is the result of psychological pain; it is a matter of the mind. Shneidman was in agreement with Alfred Alvarez, who thinks that suicide is "a terrible but utterly natural reaction to the strained, narrow, unnatural necessities we sometimes create for ourselves."[38]

In a chapter entitled "This I Believe," Shneidman categorized four clusters of frustrated psychological needs that may underlie the tormented mind of the suicidal person:

1. Thwarted love, acceptance or belonging;
2. Fractured control, excessive helplessness and frustration;
3. Assaulted self-image and avoidance of shame, defeat humiliation and disgrace;
4. Ruptured key relationships and attendant grief and bereftness.[39]

The repeated theme of these needs points in the direction of damaged attachment bonds between the suicidal person and another.

The research into suicide has multiplied many times over these last fifty years. The areas of study have included the impact of gender, marriage, dysfunctional families, economic failures, and psychological illnesses on suicide.

DEPRESSION, MENTAL ILLNESS, AND SUICIDE

In the past few years, depression and other mental illnesses have been regarded as responsible for 95 percent of all suicides. Eighty percent of persons attempting suicide have the diagnosis of depression; another 10 percent have the diagnosis of schizophrenia. For persons with a diagnosis of depression, 15 percent are at risk for suicide; for those with an impulsive behavior, about 25 percent. In addition, about 25 percent of all depressives are alcohol-dependent, and this increases the possibility of suicidal attempts.[40]

Some researchers have suggested a genetic relationship with suicide, for often the risk of suicide is greater among those persons who have had a family member commit suicide. For example, there are quality studies suggesting a metabolic problem associated with suicides. A serotonin deficiency, which is a decrease in the metabolism of 5-hydroxyindoleacetic acid (5-HIAA), appeared in a group of patients who attempted suicide. The study reported that those who had used violent means to attempt suicide had a lower 5-HIAA level in the cerebrospinal fluid than did the depressed patients who were not suicidal.[41] Other studies have identified possible additional neurochemical contributors. However, there has been no conclusive evidence as of yet.

Another contemporary topic receiving much attention is the relationship between medications prescribed for depression and their potential role in compelling a person toward suicide. Again, while the U.S. Food and Drug Administration has responded with warnings about the need to take additional care in using the medications, especially for young persons, the evidence for these medications causing self-homicide has not been conclusive.

Some factors that put people at risk for attempted suicide include chronic depression, alcohol abuse or cocaine use, death of a partner, and separation or divorce.[42] The behaviors regarded as symptomatic of a person who is considering suicide include (1) a previous attempt at suicide; (2) severe anxiety or depression; (3) easy availability of firearms, medication, or other self-destructive means; (4) concern for the effect of suicide on family members; (5) verbalized suicidal threats or plans; (6) preparation of a will; (7) impending or recurrent life crises; (8) a family history of suicide; and, (9) pervasive pessimism or hopelessness.

Although these behaviors describe some observable characteristics of a suicidal person, most people endure life's pressures without suicide. The list does provide some awareness of the depth of distress of a person, but it needs to be used with caution, as a signal only. To rely on the results of present research, whether psychological or physiological, for the answer to the reasons behind suicide negates the individual and his or her unique situation. Diagnoses may alleviate the concern of a professional and some distress of the survivors, but neither is really satisfied. Shneidman stated, "Nowadays, the gambit used to make a field appear scientific is to redefine what is being discussed. The most flagrant current example is to convert the study of suicide, almost by sleight of hand, into a discussion of depression—two very different things. (One can lead a long unhappy life with depression, but acute suicidality is often quickly fatal.)"[43]

There is almost no worse experience for the psychotherapist than to have a patient who kills himself or herself. Even worse is the anguish of the survivors, for it is never really abated—and there are at least six significant survivors for each suicide. To live and to struggle with the loss through a suicide is to mourn and to grieve for life itself.

I leave this discussion with a question: Could there be a death drive that is activated by psychological and/or physiological circumstances?

THE INSTIGATION TO SUICIDE

It is reported that the psychoanalyst Otto Will warned, "In cases of suicide, ask who wanted the patient dead."[44] In reviewing the social relationships of the suicidal person, attention has been given to the suicides within dysfunctional families, perturbed marriages, and the loss of love. The problem of intimate attachments has, however, received little analysis. In the book *Fatal Attachments: The Instigation to Suicide*, I investigate the attachment patterns of those who do kill themselves, but more importantly of the person behind the suicide, that is, of the instigator.[45] It seems almost unreal that one would bring about the suicide or death of another, yet it is not uncommon. The common expression "Drop dead" is usually spoken in jest but is sometimes seriously intended. More frequent are the unspoken wishes that something should happen to take that person out of one's life. The instigator is a person who abets the suicidal act because of his own anxieties for life.

Instigation may be conscious or unconscious, overt or silent. Margaret Little identifies the dynamics of the instigators, although she is speaking of the suicidal person. She writes, "These patients are people who cannot in any circumstances

take survival for granted. There exists in their unconscious memories and experiences of something which we must really regard as annihilation; in many cases there has been in early infancy some actual threat to life—illness of the infant or mother, hostility in the environment, . . . "[46] With instigators, their expectancy of annihilation or death is projected onto others, usually the person who is psychologically the nearest or dearest to them. The suicide of the other provides the instigator with a sense of power—over life—and temporarily allays the fears of his or her own demise. In turn, the suicidal person, seeking the love and the existential power of the instigator, introjects the death drive and acts out the suicide.

Little continues, "The fear of annihilation, however, is dynamic and all-pervading and therefore governs the patient's reactions and his behavior. . . . By reason of the life-and-death quality of the patient's experience, his concrete thinking and inability to make deductions, and the fact that events belonging to earliest infancy are being lived out in a grown-up body . . . contain a large element of actual danger (suicide, death or attack upon someone)."[47] This is the danger facing the instigator and makes for disturbed, pathological relationships with others.

Mecke identifies four types of instigators, individuals whose psyches have been so overpowered by an early experience with death that their own existence is strengthened through projection of death fears and wishes onto others.

Active external instigators deliberately incite suicide in another. For instance, the case of Tommy, whose father wanted him dead, can only be understood by an analysis of the background of Tommy's father. Tommy's father had been abandoned by his parents when an infant. He was left on a church doorstep when he became ill while his parents were escaping the Nazi scourge. The parents determined that the sick child's crying could put them in danger. Yet Tommy's father lived, with the anxiety of death pervading his unconscious, enlivened by his infantile illness and the abandonment by his parents. Tommy's father relived his death anxiety through Tommy's suicide and empowered his own will to live.

There are *passive external instigators*, who incite suicide consciously or unconsciously. They project the wish for another's death. Their mode of relating involves rejection, withdrawal, or abandonment from the person who is close to or intimate with them. The cold withdrawal is a defensive reaction against the intimacy that evokes their earlier anxieties about death. Seeking to regain the closeness, the suicidal person assimilates the death trauma and acts it out.

The *internal instigator* develops through identification with the death of a significant person during his or her childhood. For instance, if the death of a parent

early in the life of the instigator is traumatic, it may result in an almost persecutory obsession with death. Usually the relationship was a problematic attachment. The suicidal act is a feeble attempt to correct the ungratified attachment and reconnect through death.

Provocateur instigators are external instigators whose angry push for another's death justifies their own existence. These instigators actively goad the social conscience and sabotage the life of others. This category includes cult death leaders, terrorist instigators, and others who use the person as a pawn.

The fatal attachment is defined by pathological relationship patterns that exist between the instigator and the suicide victim, and in reciprocal manner, from the victim to the instigator. The attachment patterns include malevolent attachments, negative attachments, nullified attachments, fantasized relationships, ambivalent attachments, self-attachments, usurped attachments, and exploitative attachment patterns.[48]

The suicidal person is really a victim—a victim of his or her own tortured mind when expected attachments have failed or been denied to him or her. True, the attachment that the person desires is not available, for it lingers from ungratified infantile longing for closeness. Suffering from the early loss of a positive, nurturing attachment and idealistically seeking it, the suicidal person tends to bond with someone whose own sense of survival is gained by the power of life over another.

PREVENTION OF SUICIDE

The first line of prevention of suicide would be to erase the personal, social, economic, and biological factors that play such a large part in making a person despondent. That herculean effort would include elimination of conditions such as poverty, divorce, and availability of instruments of violence followed by the development of a healthier lifestyle for the individual.

The next line of prevention would be to identify the person prone to suicide and to provide him or her the necessary therapeutic guidance to enhance his or her living and alleviate psychic pain. Alerting the suicidal person's social support system to the distress of the suicidal person would imply an intense commitment on the support system's part to deal with the failed attachment bonds. Psychotherapy is a sine qua non for recovering a pleasure in living; while it cannot replace a social support system, the therapist can alleviate the suicidal person's psychic pain and redirect him or her toward life.

THERAPEUTIC INTERVENTIONS

There is no doubt that there is help for the person who is in a crisis of suicide. First and foremost, it is important to recognize that the desperateness

of the person is real and not an artifact of seeking attention. There are crisis hotlines in almost every city.

Psychotherapy with or without medication is effective and helps people through these critical and painful periods. There are different styles of psychotherapy, all of which provide benefits to the individual. In his book *An Autopsy of a Suicidal Mind,* Shneidman asked seven renowned psychotherapists to analyze a suicide letter written by a young medical doctor, age 33.[49] These therapists included psychiatrists—Robert Litman, John Maltsberger, Jerome Motto, Morton Silverman, and Avery Weisman; psychologists—Norman Farberow and David Rudd; and a sociologist—Ronald Maris. All are noted experts in the field of suicidology.[50] The eight therapists wrote from the unique perspective of suicidology, which included a *developmental* perspective that investigates the psychache as it developed throughout childhood and adolescence; a *crisis approach* in which the person gains a more positive outlook on current psychic or real-life distress; the *etiological* view that delineates how present and past problems led to feelings of suicide; a *family* perspective in which the dynamics of family interaction that led to such severe psychache are explored; a *psychoanalytic* view that analyzes the origins of feelings and reactions to life events; a *biological* view that speaks of the physiological causes underlying crises situations; and, a *cognitive psychology* approach that focuses on changing moods and thoughts in order to alter the person's approach to a crisis. Each therapist expressed a high degree of confidence that the approach could offer help for the psychache, could alleviate the troubled mind, and could provide hope and gratification for life itself. It behooves the person considering suicide to find a psychotherapist who can respond to his or her distress and own way of understanding life problems. As Shneidman emphasizes, the aim of therapy should be first of all to reduce the psychic pain, then to guarantee the inviolacy of the person so that he or she finds a "safe self" that includes the ability to protect the self, to remain separate and independent and not intruded upon by others. Finally, the goal is to help the person accept his or her pain as part of life and to aid him or her in the search for succor and acceptance.

NOTES

1. The term "psychache," used to describe the agony of the person, was introduced by Edwin Shneidman in "Suicide as Psychache," *Journal of Nervous and Mental Disease* 131 (1993): 147–49.
2. Sylvia Plath, *Sylvia Plath: The Collected Poems* (New York: HarperPerennial, 1981), 181.
3. Edwin Shneidman, *Comprehending Suicide. Landmarks in 20th Century Suicidology* (Washington, DC: American Psychology Association, 2001), 201.
4. Ibid., 202.

5. *The Shorter Oxford English Dictionary*, 3rd ed., ed. C. T. Onions (Oxford: Clarendon Press, 1977), s.v. "victim."

6. The following statistics are taken from a publication of The National Institute of Mental Health, "In Harm's Way: Suicide in America. A Brief Overview of Suicide Statistics and Prevention," National Institute of Mental Health, retrieved April 21, 2006 from http://www.nimh.nih.gov/publicat/harmsway.cfm.

7. World Health Organization, "Mental Health: Suicide Rates per 100,000 by Country, Year, and Sex," retrieved April 21, 2006 from http://www.who.int/mental_health/prevention/suicide_rates/en/.

8. The National Center for Injury Prevention and Control, "Suicide Prevention Strategies and Links," http://www.cdc.gov/ncipe/wisqars/fatal/help/helpfile.htm.

9. For the story of Sappho and Phaon, the reader is referred to J. A. Symonds, *The Greek Poets* (New York: Harper & Brothers, 1901), p. 308.

10. Simon Fanshawe, "Children on a Field Trip Understood the Suicidal Lure of Beachy Head," *San Francisco Chronicle*, January 24, 1999.

11. For further information on child suicides, the reader is referred to Cynthia R. Pfeffer, *The Suicidal Child* (New York: Guilford Press, 1986).

12. Office of Statistics and Programming, National Center for Health Statistics, Center for Disease Control and Prevention Data Source: Vital Statistics of the United States, www.cdc.gov/nchs/fastats/suicide.htm.

13. C. R. Pfeffer and others, "Suicidal Behavior in Latency-Age Children: An Outpatient Population," *Journal of the American Academy of Child Psychiatry* 19 (1980): 704.

14. C. R. Pfeffer and others, "Suicidal Behavior in Child Psychiatric Inpatients and Outpatients and in Nonpatients," in *Essential Papers on Suicide*, ed. John T. Maltsberger, MD, and Mark J. Goldblatt, MD (New York: New York University Press, 1996), 562–73.

15. Barbara Stimmel, review of *The Dead Mother: The Work of Andre Green*, ed. Gregorio Kohon, *Psychologist-Psychoanalyst* 24, no. 2 (Spring 2004): 48.

16. For these statistics, refer to National Institute of Mental Health, "In Harm's Way: Suicide in America" (see note 6).

17. Edwin Shneidman, *Autopsy of a Suicidal Mind* (Oxford: Oxford University Press, 2004), 160.

18. World Health Organization, "Mental Health Global Action Programme (MHGAP)," http://www.who.int/metal_health/actionprogramme/en/index.html.

19. R. W. Maris, "Suicide," *Lancet* 360 (2002): 319–26.

20. This quote is taken from a suicide letter written by a young medical doctor and reported in Shneidman, *Autopsy of a Suicidal Mind*, 165.

21. Plath, *Sylvia Plath: The Collected Poems*, 181.

22. Anne Sexton, *The Complete Poems*. Boston: Houghton Mifflin, 1981), 357.

23. Virginia Woolf, "Virginia Woolf, 1882–1941," retrieved April 21, 2006 from www.classic-shorts.com/bios/biowoolf.html.

24. Freddie Prinz, "Brain Candy Celebrity Quotes: Dying Words," retrieved April 21, 2006 from www.corsinet.com/braincandy/dying3.html.

25. Charlotte Gilman, Gilman was a writer who chose to die by chloroform rather than to die by cancer. Available from "Brain Candy Celebrity Quotes: Dying Words," retrieved April 21, 2006 from www.corsinet.com/braincandy/dying3.html.

26. This note and the following were selected from suicide notes collected by Art Kleiner at a coroner's office. "Suicide Notes," http://www.well.com/user/art/ suicidenotes.html.

27. H.I. Kaplan and B.J. Saddock, "Psychiatric Emergencies," in *Synopsis of Psychiatry, Behavioral Sciences/Clinical Psychiatry* (Philadelphia: Lippincott, Williams & Wilkins, 1998), 871.

28. Aisopos (a 4th century A.D. poet), "Aesop's Fables," in *Greek Lyric Poetry*, trans. Willis Barnstone (New York: Schocken Books, 1967), 231.

29. National Institute of Mental Health, "In Harm's Way: Suicide in America" (see note 6).

30. The reader is referred to the information that follows: "Older Adults: Depression and Suicide Facts" as reported in Medical Moments, http://www.medicalmoment .org/_content/risks/dec03/187856.asp.

31. I do not attempt to cover the rich history of the philosophy of, attitudes about, and resulting actions from suicide. There are excellent books that provide thoughtful overviews and analyses of the cultural responses to suicide, including *The Savage God: A Study of Suicide* (see note 33) and George Minois, *History of Suicide: Voluntary Death in Western Culture* (Baltimore: Johns Hopkins University Press, 1995).

32. Plato, *The Laws*, trans. Loeb Classical Library (Cambridge, MA: Harvard University Press, 1989), ch. 9.873C.203.

33. Aristotle, "The Nicomachean Ethics," trans. W. D. Ross, *The Internet Classics Archive*,, http://www.classics.mit.edu/Aristotle/nichomachaen.html.

34. Libanius, quoted in Alfred Alvarez, *The Savage God: A Study of Suicide* (New York: W.W. Norton and Company, 1990), 79.

35. As found in Gary B. Ferngren, "The Ethics of Suicide in the Renaissance and Reformation," in *Suicide and Euthanasia: Historical and Contemporary Themes*, ed. B. Brody (Dordrecht, The Netherlands: Kluwer, 1989), 160–61.

36. Sigmund Freud, *Standard Edition of the Complete Psychological Works*, vol. 6 (London: Hogarth Press, 1953–1965), 178–85 (quotation from 1901).

37. Karl Menninger, *Man against Himself* (New York: Harcourt, Brace and World, 1938), 5.

38. Alvarez, *The Savage God: A Study of Suicide*, p. 11.

39. Shneidman, *Comprehending Suicide*, 202–3.

40. Kaplan and Saddock, *The Synopsis of Psychiatry*, 870.

41. This is an area of research that is under intense investigation now. The source for this information came from M. Asberg, L. Traskman, and P. Thoren, "5-HIAA in the Cerebrospinal Fluid: A Biochemical Suicide Predictor?" in John T. Maltsberger and Mark L. Goldblatt, *Essential Papers on Suicide*, 342–55.

42. Office of Statistics and Programming, NCIPC, CDC. Web-Based Injury Statistics Query and Reporting System (WISQARS). Center for Disease Prevention, "Healthy Youth! Health

Topics: Injury and Violence (Including Suicide)," *Center for Disease Prevention,* http://www.cdc.gov/healthyouth/injury/index.htm. ; Kaplan and Saddock, Table 33.1–1 Factors Associated with Suicide Risk, 870; Suicide and Mental Health Association International, "Worldwide Suicide Information," *Suicide and Mental Health Association International,* http://suicideandmentalhealthassociationinternational.org/about.html.

43. Shneidman, *Comprehending Suicide,* 200.
44. This quote by Otto Will is taken from Shneidman's foreword to Maltsberger and Goldblatt, *Essential Papers on Suicide,* 6.
45. Please refer to Viola Mecke, *Fatal Attachments: The Instigation to Suicide* (New York: Praeger, 2004) for case histories and intensive analyses of the role of instigators in suicide.
46. Margaret Little, "On Basic Unity (Primary Total Undifferentiatedness)," in *The British School of Psychoanalysis: The Independent Tradition,* ed. Gregorio Kohon. (New Haven, CT: Yale University Press, 1986), 136.
47. Ibid., 139.
48. Each of these attachment patterns are discussed and exemplified in *Fatal Attachments: The Instigation to Suicide,* chapter 4.
49. Shneidman, *Autopsy of a Suicidal Mind,* p. 200.
50. Ibid., 202.

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Helping Adolescents with Self-Injurious Behavior: Cutting in Developmental Context

Lori Goldfarb Plante

Self-injurious behavior such as the cutting and burning of one's skin is an increasingly prevalent phenomenon among adolescents with a range of difficulties and diagnoses.[1,2] Self-injurious behavior involves the deliberate infliction of injury without the intent to kill oneself. Most commonly, adolescents will inflict non-life-threatening cuts or burns on their arms or legs thereby providing a visible marker of their distress. While teenagers are vulnerable to a range of high-risk behaviors, the intentional infliction of wounds through cutting is becoming an increasingly prevalent syndrome among adolescents.[2] Understandably, the discovery of a teenager with self-inflicted wounds raises horrified alarm in parents, friends, and teachers and often requires immediate psychotherapeutic intervention.

While self-mutilation has been practiced by individuals and cultures throughout history, modern psychiatric attention to self-injurious patterns of cutting and burning emerged in the 1960s[3,4] and burgeoned in the 1980s.[5,6] Viewed by some as a discrete impulse control disorder[7,8] and by others as just one of many impulsive behaviors exhibited by individuals with a range of disturbances such as anorexia nervosa, bulimia, eating disorders, depression, and borderline personality disorders,[9] the sine qua non of this form of self-injury is a repeated pattern of direct, intentional bodily harm without suicidal intent. The most commonly cited purpose of self-injury is affect regulation, in that adolescents report reductions in anxiety, tension, depression, guilt,

and loneliness.[8,10] The syndrome most often begins in early adolescence and often persists for many years, even well into adulthood.

Who are the teenagers most prone to these self-injurious behaviors? First, females are more likely to engage in self-injurious behavior of this kind than their male counterparts,[1,9] consistent with patterns indicating that males tend to utilize more lethal methods than females in a range of self-injurious acts.[2] Teenagers with depression, eating disorders, adjustment disorders, social difficulties, sexual conflicts, and often simply normative problems related to adolescent development can all seek catharsis, control, and communication through self-destructive physical acts. Few simple acts garner the type of attention and response from others that the appearance of bloody, self-inflicted wounds in one's loved one evokes. Surprisingly, cutting is becoming an increasingly prevalent phenomenon, and it is plaguing teens, parents, and schools. The prevalence of cutting in adolescents has been estimated at 1,000 per 100,000, compared to estimates of between 14 and 750 per 100,000 in the general population.[9] In a recent national study, cutting rates among patients presenting to community hospitals increased from 4.3% to 13.2% between 1990 and 2000.[2] The incidence among adolescent inpatients has been cited as a startling 40%.[10]

Indeed, cutting is frequently the most visible sign of other severe associated problems. For example, females who repetitively cut themselves also suffer from an eating disorder such as anorexia or bulimia in 40% of cases. Similarly, 62% of self-cutters have a history of sexual or physical abuse.[8,11] Thus, cutting serves to focus, contain, cleanse, broadcast, and ultimately relieve a wide range of underlying emotional disturbances. Not only does cutting raise the specter of overt suicide risk, it also can result in infection, permanent scarring, and an intractable pattern of self-mutilation. Superficial cutting, usually on the arms and legs, is probably the most common and widespread form of self-injury and will comprise the focus of this chapter.

WHY ADOLESCENTS INFLICT SELF-INJURY

Why would a completely normal appearing and acting teenager choose to inflict cuts or burns on himself or herself? What purpose could it possibly serve? Surprisingly, there are usually healthy strivings underlying these seemingly pointless acts, and untangling them becomes imperative in both understanding and intervening in the developmental struggle behind the self-destructive behavior. The need to understand cutting as not merely self-destructive but ultimately in the service of the adolescent's emerging sense

of self is critical to effective intervention. In other words, these destructive acts fall under the common adolescent theme of "Doing all the wrong things for the right reasons." It is these underlying, often unconscious conflicts that not only drive such behavior but hold the keys to stopping it.

In addition, social contagion appears to account for some of the increased prevalence of cutting.[12,13] Observation of peers engaging in self-injury can result in contagion through modeling of these behaviors as an appropriate coping device. Much like the social contagion aspects of overt suicide attempts and eating disorders and the renowned suggestibility of teenagers, the increased awareness of self-injury among one's peers may provoke engagement in such acts.

UNDERSTANDING THE ADOLESCENT IN DEVELOPMENTAL CONTEXT

The almost universal challenges of adolescence can be summed up as centering around three central themes: (1) identity formation, (2) autonomy and independence, and (3) intimacy and sexuality. Identity formation is the ultimate development of an acceptable and realistic sense of who one is, how one relates to others, and what activities and interests form the structure of one's life. Identity is rarely solidified by the end of the teen years, often evolving over the course of one's lifetime, but a consistent sense of self that emerges intact through the dramatic transition from childhood to adulthood poses a particularly daunting task. Identity confusion can result in both the normative and more problematic appearance of troubling symptoms such as depression, anxiety, moodiness, anger, school failure, and self-doubt.

Autonomy and independence are gradually achieved in the tightrope walk between maintaining critical parental attachments and yet a sense of competent independent functioning. The young adolescent is called upon to become less dependent on parents for both intimacy and decision-making assistance as he or she simultaneously ventures more earnestly into friendships, sexual relationships, and autonomous pursuits outside the home. It is a seesaw of emotional peril and exhilaration for both the adolescent and his or her parents. As adolescents transition through their teen years, they are expected to become increasingly capable of responsible and independent functioning. Accordingly, their parents are required to relinquish control and tolerate the diminished closeness they can enjoy with their children.

Intimacy and sexuality are of course lifelong themes for all of us, but adolescents are especially challenged as a result of pubertal changes and the onset of overtly romantic and sexual involvements. An imperative developmental goal is

the ability to relate intimately and rewardingly to others, and where appropriate, to integrate a responsible and healthy sexuality into one's intimate relationship. Adolescents are caught in the throes of intense sexual desires, needs for acceptance and affiliation, and the often confusing task of defining one's sexual orientation and identity. These challenges during a time of decreasing parental connection and increasing freedom make for an often tumultuous and stressful period of development.

Thus, as adolescents grapple with challenges related to the formation of identity, autonomy, and intimacy, distress and confusion are understandable by-products. However, for some adolescents, these challenges prove so painful or overwhelming as to compel them to behave in self-damaging ways. Drug abuse, school failure, promiscuity, and the like are quintessential pitfalls of adolescence. Increasingly, self-injury is becoming a mode of coping with overwhelming distress that the adolescent is otherwise unable to contain.

WHAT MOTIVATES SELF-INJURY? DOING ALL THE WRONG THINGS FOR THE RIGHT REASONS

The quelling of intensely negative emotions is often cited as the most immediate goal of self-injury. In fact, its usefulness in quelling distress renders many teens reluctant to discontinue it.[14] The adolescent who is overwhelmed by longing, sadness, hurt, self-loathing, anxiety, or a host of other emotions commonly resorts to cutting as a means of refocusing emotional pain onto a physical act over which he or she has control. Thus, many adolescents report that cutting helps them feel: numb, calm, in control, relieved, or otherwise less distressed.

> *Case Example*: Denise is a 17-year-old high school senior who often has failing grades and is not sure what she will do after graduation. Recently, she experienced a miscarriage after becoming pregnant by a "friend with benefits" whom she now hates. She feels alone and inadequate and cannot tolerate the depth of her anxiety and despair. Cutting has become a ritual that helps to drain these feelings, as it reliably leaves a calmer, trancelike numbness in its wake. She was once briefly hospitalized for threatening to commit suicide and often feels intense remorse over the litany of scars that cover her arms, legs, and neck. Yet, she is not able to control the impulse to cut herself when feeling emotionally overwhelmed; it is the only thing that provides any relief.

A second goal of self-injury can be the conscious or unconscious wish to alert others to one's distress. The sight of bloody scars is literally a red flag to parents, friends, and teachers, who are inevitably alarmed by these obvious and disturbing signs of a troubled adolescent. Importantly, because the teen is often

in conflict over the desire to be independent yet still reliant on outside support, the scars are often displayed for "accidental" discovery as opposed to a direct plea for help. Indeed, while the scar screams out the teen's desire for help, often the self-injurer is decidedly resistant or even defiant to intervention. The cutting then becomes the battleground upon which the dependence-independence conflict is fought within the adolescent as well as between himself or herself and others. It is this conflict that can make self-injury such a complicated and intractable problem in teens.

Case Example: Marta, 13, has always seemed to be the "perfect" child, with everything going for her. She is bright, attractive, athletic, sociable, and an excellent student. Her parents, teachers, and friends have come to expect great things from her. What they don't know, however, is that Marta doesn't really feel very smart and she worries that in high school her inadequacies will be revealed. No one seems to realize the anxiety and pressure she feels before tests or track meets. Also, many of her friends already have boyfriends and some sexual experience, and she feels unready and frightened by the complexities of entering into such relationships. Furthermore, she hates the good girl reputation she has at school. She begins cutting partly to illustrate her invisible suffering and to broadcast to others her hidden complexities in a way that words just don't seem to convey.

A third goal of self-injury can be to punish or reject hated aspects of oneself. Commonly, poor body image and low self-esteem create such internal rage and misery as to lead the teen to harm himself or herself in this manner. The cutting serves to provide a sense of cleansing and relief that helps the teen regain equilibrium and a temporary sense of redemption. By symbolically excising the hated traits, the teen is in a sense saying, "I will not accept this and therefore it is no longer a part of me." Self-injury can take on the type of magical thinking qualities that drive the anorexic to starve or the bulimic to purge: by ridding oneself of the hated feeling, the cutting ritual serves to restore a sense of greater peace and acceptance.

Case Example: Allana is 15 and has been struggling with bulimia for two years. She has been at trouble both at home and at school for smoking marijuana and for drinking so much she has twice passed out. Allana is preoccupied with her weight and often feels out of control with her pattern of binging and purging. She is furious at her self for giving in to these urges and hates the body that torments her so. She has a host of cigarette burns that she has inflicted primarily as a form of self-punishment for what she views as her hideous behavior. It is a form of penance she has developed, which rewards her with less distress in the forms of guilt and shame.

Often, a fourth goal of cutting is the declaration of autonomy and power. As parents campaign to make the adolescent stop the loathsome behavior, a dynamic develops wherein the teen discovers a newfound source of tremendous power. Parents and others will plead, demand, panic, threaten, and otherwise try to help the teen stop injuring himself or herself, but alas, the teen alone maintains the power to cut or not to cut. This sense of control over others can be a misdirected and passive means of expressing independence and a dramatic statement to the effect, "I am not your little girl anymore; I have my own mind and will make my own choices." Thus, the cutting can serve as a vivid assertion that the teen is demanding more freedom and autonomy and as a demonstration of inner strength and resolve. Helping the adolescent reassert these healthy strivings through positive choices and active negotiation with parents can greatly assist the teen's ability to relinquish the cutting.

Case example: Jamie is 16 and frantic to break loose from her parents' suffocating restrictions on her social life. They don't understand her urgent need to be with her friends and outside the stifling house virtually all the time. She cannot stand to be separated from her friends and left out of all the drama, and once when grounded for the weekend, she carved a gash in her wrist out of rage and frustration. Once her parents found out, they were suddenly terrified and no longer so confident in their parenting. They seemed afraid that if she wasn't happy, she would harm herself, and they became more tentative with their authority and more apt to let her have her way. Cutting was certainly one way they could see that she would not let them control her: she was calling the shots now. But at the same time, why was she so unable to be alone without feeling anxious and depressed, and so afraid that her friends might abandon her?

Fifth, and perhaps most difficult to grasp, is the adolescent's attempt to express his or her changing identity in the act of self-injury, replete with complex emotions, thoughts, and conflicts that revolve around more adult themes than ever previously experienced. The adolescent is often displaying to friends and others both the pain and the intriguing nature of his or her nascent maturity. The scars garner a curiosity and a mystique that often appeal to the teen in the quest to declare himself or herself no longer a child but a highly unique, hip, and complex person. Thus, as the teen struggles with the enormous distress of conflicts regarding autonomy, sexuality, and a changing sense of identity, the cutting and scarring represent the relinquishing of childhood's innocence and dependency and the advent of full-blown adolescence.

Case example: Kay, 15, is in love with her best friend Diane. She has never had such strong feelings before for a boy or a girl and longs to begin a romantic

relationship with Diane. She isn't sure if she's gay or bisexual, but something unexpected and powerful has taken hold of her. Unfortunately, Diane has made it clear to Kay that she loves her as a friend but does not share her romantic feelings, insisting that she prefers boys. Kay feels isolated and rejected and yet emboldened by the force of her newfound romantic and sexual desires. She is not like everyone else, and it is painful and wonderful all at the same time. Overwhelmed with frustrated longing, Kay cuts her arms and wears tank tops to school. Some people comment, but mainly her schoolmates simply take notice and look at her with new intrigue in their eyes. Kay is declaring her newly unfolding identity and the competing feelings of pride and distress it entails.

Self-injurious behavior is therefore often much more than simply the expression of pain or a cry for help. While it is easy to dismiss this disturbing behavior as the hostile, manipulative actions of an exasperating teen, it is absolutely imperative that parents and clinicians understand the primary motives as being rooted in otherwise healthy developmental conflicts related to identity, autonomy, and intimacy. For cutting not to remain the entrenched battleground upon which these titanic adolescent struggles are fought, the deeper meanings and ultimately healthy strivings need to be uncovered and drawn out. Thus, self-injury is a negative behavior perversely employed toward the ultimate goal of successful adolescent development.

INTERVENTION AND TREATMENT STRATEGIES

Cutting is understandably feared to indicate that a teen is suicidal. However, cutting is rarely an exit strategy and is most commonly a misguided effort to both cope with and communicate despair. The appearance of bloody scars on an adolescent's body understandably elicits alarm and immediate attention from others—often the desired response motivating the cutting in the first place. Parents and others may assume that the adolescent is suicidal and may implement various forms of crisis management or hospitalization. Indeed, true suicidal intent and risk needs to be fully assessed once cutting becomes apparent, but it is thankfully not meant to be a lethal act in itself. Successful treatment most commonly hinges on the calm articulation and recognition of the adolescent's conflicts, an avoidance of a power struggle with the cutter, and the development of alternative strategies to both cope with painful emotions and attain truly desired outcomes. All treatments need to assess suicidality on an ongoing basis, employ "no-suicide" contracts, and involve medical professionals to assess the risk of infection, general health, coexisting eating or substance abuse disorders, and the potential usefulness of psychotropic medication in the patient's overall care.

CRYING OUT IN PAIN: AN EFFORT TO CALM
AND CONTAIN PAINFUL EMOTIONS

The first intervention with an adolescent who is discovered cutting is to express concern over their obvious pain. Often, helping parents to not panic and overreact is critical to the teen's ability to communicate his or her distress directly and relinquish cutting as a coping mechanism. Only when the teen feels confident that others are trying to assist and not control him or her will he or she engage in a nonbelligerent dialogue. It is critical that parents, friends, and clinicians all acknowledge the stark reality of the cutting behavior: only the teen has control over the behavior. In other words, no one can make the teen stop cutting; he or she is in charge.

When cutting is used to quell intense emotional distress, it is important to glean information about what circumstances bring on the urge to cut. When, where, and why is it most likely to occur? Once the teen can make the association between a painful event or thought, the need to cut, and the emotional relief gained by cutting, intervention can proceed. Often, teens are quite open to discussing alternative strategies for coping with overwhelming distress. These can include journaling, calling a friend, taking a walk, listening to an inspiring song, or other individual strategies useful to the teen. The notion that the teen has a choice over whether or not to cut is extremely important. Only then can he or she begin to take responsibility for his or her actions and their outcomes and build a bigger arsenal of coping strategies.

CRYING OUT TO OTHERS

Cutting is usually a means of communicating with others. It elicits intense reactions, particularly from parents who become alarmed at the realization that their beloved child is mutilating himself or herself, often permanently. The implicit threat of suicide mobilizes parents, teachers, friends, and ultimately clinicians. The self-injurer suddenly wields terrible power in their defiance of admonishments to cease and desist the bloody behavior. At once the cutter seems to be saying, "Help me, I'm suffering" yet at the same time declaring, "You have no control over me and can't help me." Therein lies what is frequently the central struggle for the adolescent self-injurer as he or she seeks to overcome a classic developmental impasse: the need to stay dependent at an unsteady time of life, yet the simultaneous need to seize autonomy and independence from parental figures.

The inherent irony of this mixed message makes intervention a delicate and difficult task. Parents and clinicians must strike a balance between

offering support and setting limits yet demonstrating clear recognition of their lack of choice in the teen's actual injurious behavior. Teenagers need to know that their parents are available to support them, yet they are compelled to assert that everything is their choice and their own doing. The teen needs to hear the difficult message that adults are concerned and dedicated to helping, but for better and for worse, the teen holds all of the choices and control. With the clear caveat that suicidal risk will be swiftly addressed through hospitalization to assure safety, minor self-injury cannot be stopped by command or force. The teen needs to perceive that others are reaching out to assist him or her in achieving his or her goals and are not simply demanding that he or she behave.

Clinicians and parents need to contain their own anxiety regarding the self-injurious behavior to calmly and nonjudgmentally convey their ability to tolerate the teen's intense emotions and offer competent assistance. As parents avoid panic and overt distress, the power and the intensity of the cutting often abates. Without effecting dramatic reactions in others, the teen's need to advertise his or her message through self-injury is no longer reinforced, leaving the teen freer to choose other modes of expression and communication.

CRYING OUT A NEW IDENTITY: VALIDATING GROWING DEPTH AND COMPLEXITY

When a teen is shown an interest in his or her private emotional and social life, he or she can begin to give voice to newly discovered parts of himself or herself. Passions around romantic and sexual feelings are newly experienced; the longing to win the acceptance and approval of peers, newly imperative; and the ability to think complexly, suddenly strengthened by brain development advancing abstract thinking abilities. Reflecting and validating these areas of rapid growth assists the teen's self-understanding and self-esteem. The therapist in particular can then assist the adolescent in redirecting his or her changing identity toward productive as opposed to destructive forms of self-expression. What are the teen's thoughts about his or her sexual orientation? How might he or she approach conflicts with friends in a more successful way? How might he or she negotiate maturely with parents around a desired freedom or privilege? What might be other ways of managing the unbearable stress of academic expectations? These are but a small sprinkling of the larger issues that adolescents need to confront and where clinicians need to focus their work. The self-injurious behavior is, after all, secondary to conflicts in these areas and needs to fade into the background as more active coping with developmental challenges takes hold.

Case illustration: Sharon, age 14, is furious that her parents won't let her go the upcoming concert with all of her friends. They don't understand how important this is to her, and they insist she can't go unless adults will be there to supervise. She storms off to her room, slams the door, and cries. This is her best chance to get together with Josh, the guy she's had a crush on, and if she's not there, Tanya will definitely go after him. She's not even sure that Josh likes her; she's not as thin as some of the other girls and not as "fast" as boys like him might prefer. Sharon has never felt this kind of longing for a boy, much less so many inexplicable feelings of desire, fear, love, and anger. She can't stand it!

Sharon hates herself right now. She hates her parents and the horrible way she feels. There isn't even anyone who understands her distress, least of all her parents. She thinks about those girls at school known as "cutters" who are either rumored or known to cut themselves. They seem mysterious, different, and obviously in some sort of distress. Sharon walks into the kitchen and takes a paring knife from the drawer. She takes it back to her room, thinking how utterly clueless her parents are. On the back of her forearm she prepares to inscribe her signature of distress. Will it hurt? Who cares, nothing is as bad as how she feels. This pain will be her doing; she can control it. She steels herself, intent on numbing herself to any pain or awareness of her own perverse behavior, and coolly observes the striking red beads of blood as they erupt beneath her barely penetrating knife blade. She's mesmerized, transfixed, and squeezes the cut to make the blood drip onto her desk. Slowly she realizes that she feels calmer now, stronger, and more in command of her pain. This cut tells the story of her internal quagmire of frustrations, and it can only be read by those to whom she reveals it. It seems an appropriately perverse way of expressing this confluence of confusing emotions, and cutting quickly becomes a preoccupation for Sharon, resulting in a litany of scars on her arms and stomach.

DEFINING THE CONFLICTS AND INTERVENING EFFECTIVELY

This episode of Sharon's reveals a great deal about the 14-year-old issues that overwhelm her. First, she desires more freedom and independence, but her parents constantly obstruct her in their efforts to assure her safety. Second, she does not know how to communicate her burgeoning emotional investment in peer relations and culture. She is not a little girl anymore, yet her parents don't seem to recognize the changes in her. Third, Sharon is not yet equipped to calm or cope with the intensity of these new emotions. Thus, with her identity,

independence, and intimacy needs all feeling hopelessly thwarted, she turns to self-harm as an expression of her torment.

When her parents discover that their daughter has dozens of self-inflicted scars, they are shocked and appalled. In fact they are terrified, worried, and yet angry that she has chosen to do this seemingly ridiculous, destructive thing. They confront her with their concerns, and the intensity of their reaction stuns even Sharon. She feels immediately attacked and defensive and withdraws into a posture of defiance and then distance. Her parents are frightened that she might be cutting herself again in her room, behind the locked door, and they feel helpless to intervene short of threatening or beseeching her to stop. Might she even try to kill herself, they wonder? What should they do?

Parents reflexively react to threats to their children with intense emotional and protective instincts. It is extremely difficult for parents to remain calm and cogent when faced with the revelation that their daughter is engaging in truly disturbing behavior. Not only do they want the behavior to cease immediately, they are alarmed by the implications of emotional instability inherent to self-injurious behavior. Suddenly, concerns literally related to life and limb are brought into focus. Naturally, then, parents need professional guidance and support in treating a self-injurious teen.

After several consultations with a psychologist, Dr. Galvan, Sharon and her parents began actively confronting the developmental issues underlying the red flags of her cutting behavior. An initial evaluation was undertaken by Dr. Galvan to not only assess Sharon's psychological and behavioral status, but importantly, her suicide risk and immediate danger from any related self-destructive activities (e.g., drug or alcohol use, sexual risk-taking, anorexia or bulimia). Sharon strongly denied any intentions, thoughts, or plans to seriously injure or harm herself, and a "no-suicide" contract was developed in which Sharon promised to contact Dr. Galvan if she ever did feel the urge to more seriously harm herself. A medical exam was recommended to assess the severity of her wounds and rule out any current risk of infection.

Sharon and Dr. Galvan discussed her current life context including her social, emotional, familial, and academic environments. Sharon was able to describe her intense frustration with her parents along with deep-seated feelings of self-doubt regarding her appearance and competence. Her feelings for Josh and pressing needs for acceptance by both female and male peers were notable for their urgency and the anxiety they generated. In short, Dr. Galvan and Sharon began to understand the key conflicts underlying her misery and the corresponding need to injure herself. These conflicts are multiple. First on her developing self-image as a maturing and social adolescent, with all its inherent anxieties.

Second, the classic developmental struggle, fraught with ambivalence galore, for the teen to separate and become more independent while the parents ease up controls had begun in earnest. Third, the confluence of intense, confusing emotions at a time of rapid hormonal change rendered Sharon unable to effectively cope. She needed alternative strategies for contending with emotional distress that did not involve self-harm and that more successfully achieved her goals.

Critical to any effective intervention with teenagers is concurrent consultation with parents. The adolescent's journey is inextricably linked to his or her parents, and they each must adapt to the rapid developmental changes facing them both. While teens struggle with their own challenges, parents suddenly face a loss of control, a loss of intimacy, and a new set of behaviors and emotions emanating from their previously predictable child. It is a process of enormous give and take; mutual gains and losses; huge successes and dismal setbacks. Thus, the parents need consultation and support in order to assist their teenager's successful transition through adolescence.

Sharon's parents met with Dr. Galvan and conveyed their worries and many questions. They had never seen her so moody before; never dealt with her current level of defiance; and felt unsure where and how to set limits. Dr. Galvan helped them understand the normal developmental transition that they, too, were undergoing, as their parental roles were shifting with Sharon's evolving needs. They became better able to understand the conflicts underlying her seemingly senseless fits of emotion, for example, the age-appropriate insistence on spending more time with friends and the growing ambivalence around parental control and dependency. Sharon's parents needed to first ground their understanding of Sharon's self-injurious behavior in the context of age-appropriate developmental challenges. This understanding better equipped them to support Sharon's appropriate expressions of autonomy and independence while maintaining a loving, supportive but less hovering presence. This started with the very difficult task of accepting that Sharon was the only person in control of her own cutting and that for the time being, they needed to convey their concern yet contain their own intense emotional responses.

Sharon felt truly validated and supported by this intervention with her parents. As the notion of a two-way street of negotiation and communication took hold, Sharon finally felt that she had some avenues through which to assert her needs with her parents. She also understood a bit better that her parents were only doing what loving parents tend to do: reacting protectively and only reluctantly relinquishing intimacy and control with their daughter.

This explicit articulation of the developmental tasks facing both Sharon and her parents provided a framework within which they could better

understand the individual and collective challenges facing them. This helped to externalize and diffuse conflicts in the sense that they could now grasp the real issues at the heart of their struggles. That is, the inexorable process of development was the ultimate culprit in their midst rather than merely the angry behavior of a disturbed adolescent or the controlling actions of insensitive parents. Sharon and her parents were thus better able to humanize themselves and each other in this difficult process, and to see each other more as allies than adversaries.

Sharon insisted to Dr. Galvan that her self-injurious behavior gave her an important sense of identity and control. The central work of treatment involves assisting the teenager in finding more productive means of self-expression and control while acknowledging the even more daunting nature of the real-life challenges that cutting merely assists her in actively avoiding. For Sharon, she felt particularly anxious about her ability to attract a boyfriend and earn a secure social niche among her friends. She witnessed major changes in many of her friends, who were suddenly dressing more provocatively, becoming more aggressive in pursuing friends and boyfriends, and seemed to Sharon to be light-years ahead of her in tackling the sexuality and independence aspects of adolescence. At the same time her body was developing, but to her the result was primarily a feeling of being fat and therefore unattractive and inferior. Her self-esteem and sense of control were diminished by the changes she observed both within and outside herself.

On one hand, Sharon wanted her parents to let her go to concerts and stay out late and generally stop treating her like a child. But on the other hand, she was also nervous about going to the concert and contending with the scores of teenagers, drugs, and rowdy elements characteristic of heavy metal concerts. Similarly, she wanted a later curfew but was aware that after ten o'clock many of her friends started hooking up with boys and she wasn't sure how she felt about that. While she wanted her parents to stop nagging her about homework, she herself was deeply troubled by her poor grades. Thus, it was critical that Sharon learn to recognize and assume more responsibility for her own very natural personal fears and conflicts. Only then could she implement more effective, more honest solutions and choices. As Sharon's parents learned to listen to the quiet conflict underlying her loud protestations, they were better able to understand Sharon as simultaneously a vulnerable child and a maturing young woman struggling with increasing pressures and demands.

While both Sharon and her parents' psychological understanding and communication improved, the need remained to assist Sharon immediately with a means of confronting so many stressful challenges without resorting to self-injury. Cognitive-behavioral interventions that actively target specific thoughts

and behaviors can be essential in the treatment of self-injurious behavior. These interventions tend to connect the precipitating cause, emotional response, and subsequent destructive behavior in the adolescent's consciousness as a related sequence that he or she can learn to interrupt.

The first step in this process often involves the teen recording aspects of the self-injury sequence in a log. When did you experience the urge to cut? What were you feeling at the time? How did your body feel? What events, feelings, or thoughts preceded the urge? What was the intended goal of the self-injury? What would be the intended and unintended messages communicated to others through the self-injury? What action did you finally take? What was the result? These questions can be addressed on a log sheet or journal and then carefully reviewed during therapy sessions. There the adolescent can begin to develop the self-knowledge that can empower him or her to make changes and alternative choices.

Alternatives to self-injury are a cornerstone of treatment. There are many actions the teen can take in response to emotional distress; for example, the teen can confront the person inspiring his or her anger, or call a sympathetic friend, or take a walk, or cry, or simply do nothing and weather the emotional storm knowing that it will indeed pass. Teenagers need to build a new arsenal of coping skills now that the childhood options of running to one's parents or throwing a tantrum no longer seem age-appropriate. Working with the teen to define his or her own set of alternatives to self-injury focuses the responsibility and the means for coping squarely on the teen and can empower him or her to actively choose not to cut.

Common alternatives to self-injury include journaling, exercising, listening to music, leaving the room, taking a bath, drinking tea, watching television, calling a friend, contacting the therapist, looking at photos with positive memories, cuddling with the family dog or cat, or writing a letter to the friend, teacher, or family member toward whom the teen may feel frustrated or enraged. Individualizing the list as much as possible helps the adolescent identify with his or her own options and take ownership over the process.

Sharon began a log of every occasion on which she felt a compelling urge to harm herself. She recorded the time, location, bodily sensations, emotions, and thoughts accompanying the urge. She also forced herself to think about what precipitated these feelings, how she expected the cutting to bring relief, and what she might ultimately be seeking to communicate through the cutting and visible scarring. She would then record at least five alternatives to actually engaging in the cutting. Finally, she would record what action she ultimately did take and the outcome.

For Sharon, strong feelings of anger, self-doubt, and longing tended to precede the episodes of self-injury. When she felt furious, her body felt hot and

full of energy; when she felt lonely her body felt inert, tired, and miserable. She learned to differentiate between these various feelings and sensations and put words to them. This exercise alone helped her feel less overwhelmed and helpless in the face of an emotional storm as she could break down the weighty burden into more identifiable pieces. She also learned to associate the events, thoughts, and interactions that preceded these intensely distressing emotions. Was she stressed out about the midterm exam? Was she feeling rejected? Was she making negative judgments about her physical appearance? Was she feeling thwarted by her parents in achieving a desired freedom? Once the picture became clearer, Sharon was able to imagine alternatives to cutting that would achieve her goals without injury and possibly with even greater success. Her alternatives included (1) journaling about her thoughts and feelings; (2) writing a letter to her parents expressing her feelings and needs; (3) calling a friend and asking for support and reassurance; (4) playing a mindless computer game; (5) physically removing herself from her room to another location; and (6) listening to music.

Dr. Galvan made it clear that these alternatives would take some time and experimentation to work as well as her habit of self-injuring. Each week they reviewed her log and discussed the recorded sequences. Importantly, Dr. Galvan worked with Sharon toward better understanding the healthy, positive meta-issue driving the urge to cut, such as a desire to feel loved, a desire to make independent decisions, or self-doubt regarding perceived limitations. Once Sharon could see, for example, that her fears of rejection were better overcome through active communication and engagement with her friends than by the quick fix of cutting, she could make more positive choices.

Sharon particularly found journaling to be a satisfying means of both soothing herself and expressing her thoughts and feelings. In so doing, Sharon was able to see in black and white the evidence of her own internal and interpersonal struggles and the maturing parts of her that were heroically grappling with the challenges inherent to adolescence. She could keep these insights wholly private or share selections with her therapist, a friend, or even a parent with whom she had trouble communicating. She also found that by simply leaving her room she could "change the channel" as it were and allow the emotional storm to subside while she watched television, prepared a snack, or sat on the front step. She also learned to rely on a friendship with Joanna that was fast becoming more intimate as she contacted her more frequently in times of distress.

Sharon was gradually accepting that only she could and must surmount not only the cutting but the larger struggles compelling it. As the focus shifted to her goals for intimacy, competence, and realistically defining herself as a complex individual with strengths and limitations, Sharon engaged less and less often in self-injury. Once her parents and friends no longer responded with alarm and urgency to fresh scars, the cutting became a less powerful tool for communicating and increasingly became viewed by Sharon as the unpleasant and useless

coping strategy it was. The focus became her struggles, her goals, and her choices, and she herself, the only beneficiary or victim of them. Simultaneously, Sharon's parents had begun accepting their lack of control and were stepping back from inserting themselves into Sharon's struggles. It became clearer to Sharon that she wanted and needed her parents' support but that she had to assume responsibility for either making good independent decisions or seeking out their assistance. This, ultimately, signifies true healthy development as the teen becomes more competently independent while remaining securely invested in supportive relationships with parents and peers.

LARGER SOCIAL AND CULTURAL FACTORS

Since time immemorial people have engaged in body art, adornment, scarring, and other symbolic rituals involving trauma or visible marking of the skin. In many American cultures, tattoos and piercings are employed much like clothes or hair styles to signify affiliations with subgroups of peer culture and disassociation with mainstream mores. Self-injury can be a truly private act, but more often the evident scarring conveys significant meaning in each person's cultural context.

While it is beyond the scope of this chapter to address the in-depth social forces acting upon youth in diverse socioeconomic and racial groups, clearly our broader society's ever-increasing focus on appearance makes the skin an ideal billboard for advertising identity. For youths who self-injure, the message is that of a sense of damage, daring, and exquisite pain. Fresh wounds scream more urgently and immediately than the gradually developing evidence of anorexia, bulimia, depression, or sexual abuse, therefore affording the teen immediate and urgent attention.

Media also increasingly highlight sensationalized, aberrant behavior. The explosion of reality television attests to the public's fascination with dysfunction, exhibitionism, and the exposure of private lives. Few behaviors are as shocking as a young person intentionally carving himself or herself bloody, immediately declaring himself or herself a spectacle of pain and fascination. In an ever-competitive society it may be more difficult to distinguish oneself through one's accomplishments than through the demonstration of victimization or dysfunction. "Body art" consisting of tattoos or multiple piercings, has increasingly become commonplace among adolescents and is generally a more socially acceptable means of self-expression than cutting.

Social contagion has been recognized as a significant influence in the spreading epidemic of cutting. Studies have concluded that even a majority of self-harm incidents on an adolescent psychiatric ward may have been induced by contagion.[12,13] This spread of self-injurious behavior was even observed in adolescents

who had previously been unaware of this behavior existing. Self-injury may even be more socially contagious than suicidal behavior among adolescent inpatients.[13] The compelling need for adolescents to identify with peers and try out all sorts of ill-fated activities readily explains the spreading use of cutting as a means of coping with and expressing pain.

In short, the meaning and message behind self-injury can only be deciphered in the context of each adolescent's peer, family, and cultural milieus. This is precisely why intervention often requires more than a laser focus on the teen's seeming pathology and on aspects of his or her environment that can be drawn on as resources or addressed as detriments. A biopsychosocial approach emphasizes the need to integrate biological, psychological, and social factors into a meaningfully individualized treatment strategy. As a result, group psychotherapy, family therapy, and medication can be essential components of a comprehensive intervention.

In Sharon's case, a number of relevant social and environmental factors contributed to her distress. First of all, as an average student in a high achieving, highly educated and successful family, Sharon viewed herself as a de facto failure in her parents' eyes. Second, her parents had been contending with a severe strain in their marriage, and the tense, unhappy home environment created a discomforting feeling of anxiety for Sharon. Third, Sharon's peers were suddenly embracing pop culture with a vengeance, and she was feeling pressure to grow up, behave sexually and dress in more provocative ways than she felt comfortable. Finally, Sharon felt new pressure to be competitively thin and attractive and saw herself as a contender in this social realm but as hopelessly unexceptional in school or sports.

Dr. Galvan recommended couple's therapy for Sharon's parents and conducted several family sessions in which her parents could validate her perceptions yet reassure her that they were working on things. Sharon was also referred to group treatment with a psychologist who conducted an appropriate group of 14- and 15-year-old adolescents with similar difficulties. Sharon was also encouraged to establish a relationship with her academic counselor toward the goal of better defining her own goals and aspirations and assisting her in finding meaningful volunteer work or paid employment.

CONCLUSIONS

The increasing prevalence of self-injurious behavior among adolescents demands particularly sensitive and even sophisticated intervention by clinicians and families. The cutting needs to be viewed as the complex manifestation that it is and not just the weird, provocative behavior of an unruly adolescent.

Frequently, interventions focus immediately on demands that the adolescent cease the behavior without providing needed alternatives or insights. This leaves the adolescent feeling stranded and misunderstood, often only escalating his or her despair and infliction of injury. Critical to any effective treatment is an understanding of the teen in the context of his or her developmental stage. In addition to in-depth understanding, competent limits, comprehensive treatment options and medical oversight need to be implemented.

Perhaps most surprising to both parents and teenagers is the revelation that cutting represents positive, healthy strivings screaming to be surmounted. Reframing the cutting in the context of the teen's age-appropriate conflicts with an emphasis on his or her innate positive strivings helps to shine a light on what is right about the teen as opposed to what is wrong. Avoiding the head-on collision of criticizing and condemning the teen's behavior provides an avenue for far greater success in enlisting the teen's openness and cooperation.

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Reading, Writing, and Therapy: Mental Health Issues Among College Students

Julie B. Jampel

Jan* matriculated at a large eastern university after growing up in the Midwest with her two older sisters and younger brother. She did well academically in high school and spent her time at home hanging out with a small group of friends. There was nothing in her personal history to suggest that she would have a difficult time adjusting to college and campus life. However, two months after she arrived on campus, she still had not met any fellow students with whom she felt comfortable, she struggled to keep up with her French class, and she was gaining weight from eating too much in her residence hall at dinner. She began to feel overwhelmed and believed she made a poor choice in selecting a college so far from her family and high school friends. When she sat down in a therapist's office at her university counseling center in November of her freshman year, the first thing she said was, "I don't know why I'm so unhappy here. I've never had this trouble before."

Why was Jan's experience at college so different from her experience in high school? How do her goals and circumstances as a college student differ from those of a younger adolescent? Many things have changed for Jan. She left the home her parents made for her and now needs to make her own decisions and set her own guidelines—including, for example, how much she will eat when presented with the wide variety and abundance of foods in her residence hall.

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* All names in this chapter have been altered for privacy.

She also left a group of friends who grew up with her in the same neighborhood; now she meets people from many different backgrounds and parts of the country. Previously a good student among kids representing a wide range of abilities, she currently finds herself among many other good and even better students. When Jan used to think of her future after high school, she thought of college and saw herself as a student for another four years. Now when she thinks of her future, she sees . . . question marks. What will she do professionally? What role will she serve in society?

Some of the issues Jan faces as she begins her college years have been well documented by developmental and clinical psychologists. Erik Erikson's psychosocial stages of development in adolescents and young adults highlight two of Jan's struggles—identity versus role confusion and intimacy versus isolation.[1] Jan skimmed through the college course catalogue shortly after she arrived on campus, as she had begun to think about which field of study she wanted to claim for her major. She was pretty sure she favored the humanities, but she enjoys art history as much as English literature, and she also likes cultural anthropology, one of the social sciences. She felt overwhelmed by her multiple interests, and she felt confused when she thought about her career possibilities. Did she want to be a writer, a curator in an art museum, a teacher or professor, or perhaps a researcher or relief worker in another country? She felt a bit hopeless about choosing a path amid so many options. Jan also felt pessimistic about establishing—with a new group of peers and eventually within a family of her own—the comfort and familiarity she enjoyed with her family and friends from home.

Alan, an 18-year-old freshman from New England, grappled with different, but no less distressing, identity concerns when he enrolled at a small college in his home state:

> Alan was shy and did not date much in high school. Shortly before Thanksgiving, he asked a young woman from his economics class out for dinner. Despite feeling self-conscious, he had a good time. He felt confused and worried, though, because he was attracted to a guy in his calculus class. Did this mean he was gay or bisexual? Alan didn't know how to understand his sexual desires, and he began to feel anxious much of the time. He also stopped going to church, even though he had previously attended church regularly with his parents and younger brother, and he felt guilty about not going.

Although students seek out university counseling centers for all kinds of reasons, students like Jan and Alan are typical in that they struggle to manage developmental conflicts—that is, they grapple with issues related to growing up and becoming their own person. Over the course of the academic year, there

are two surges in presentations that reflect developmental issues. Through case examples, these will be discussed below.

HOMESICK FRESHMEN, SENIORS ADRIFT

From September through November, many freshmen seek services because they miss their families and hometowns and feel miserable at college. Sometimes this expresses itself as acute separation anxiety, in which a student cannot function on campus because he or she is intensely longing to return home to be with family and friends, and to the student it feels as though being home is the only way to quell the anxiety. Other times it expresses as a milder anxiety and dysphoria; a student wishes to be home because college life does not seem to be working out as planned or does not meet expectations. A student may not have made any friends on campus, for example. A student in this situation can function at college, but he or she feels unhappy and wants to return home. By late November, these presentations have largely stopped. A few students may have left school and gone home; most students, however, have adjusted by the end of their first semester.

What factors influence homesickness in freshmen? Two factors stand out— a history of separation anxiety and high expectations for instant adjustment to college. Sue, for example, told her counselor that she had always left sleepover parties early when she was in elementary school, and she had cried so long and hard when her parents took her to overnight camp at age nine that they returned just a few days later to bring her home. She spent the first week of college in her room crying and calling her mother multiple times each day. She did not attend classes and did not eat much, as she had no appetite. After encouraging Sue to stick with it for 10 days, her mother came to see her, and together they sought help from the counseling center. Sue's separation anxiety had gone untreated before; with treatment, she adjusted to being at college and to being away from her mother, although reaching this point took most of her freshman year.

In contrast to Sue, Jill had no history of separation anxiety. In fact, change and transition had always gone well for Jill. She entered college thinking she would love all of her classes and would become close friends with a group of girls by the end of the first week. When this didn't happen, she grew worried and discouraged. As she told her counselor, she had expected that she would be sitting around eating pizza with a bunch of friends by now, like the picture in her college brochure. With the support and perspective of her counselor, Jill was able to relax and give herself more time to meet her goals. She developed some friendships, and she really enjoyed a couple of her classes; she no longer expected to love all of them.

Whereas freshmen need to transition from home to college, seniors need to transition from college back out into the world. For some seniors, decisions come easily. They know they want to attend graduate school or get a particular type of job. They apply for various jobs or graduate programs, and they start looking for housing when they know where they'll be living. Things fall into place. For other students, though, the college years have not resulted in a sense of direction. These students still don't know what they want to do after graduation, and they haven't found a field that really interests them. They don't know where they want to live, either. Each spring, with graduation looming, these seniors appear at university counseling centers hoping to find answers. They might feel anxious about the future, sad that college is ending, or confused about their next steps. Amy, a senior who sought services in early April, reported feeling all three. She noted that she felt as though she no longer had a purpose or place in life. She would have to smile during graduation for the sake of her parents and two siblings, but that would be an act. In the waiting room she had seen a magazine cover in which a young actress was smiling broadly. She believed that the actress truly had something to smile about—she had appeared in a couple of movies and seemed to have a promising career ahead of her—whereas Amy had no clue about what she wanted to do for the rest of her life. She was often tearful and seemed alone as well as lost. One of her roommates was going to medical school in the fall and would work as a research assistant at a local hospital over the summer. Amy did not even have a summer job lined up, despite pressure from her parents to find one. She didn't see how she was going to break out of this rut, and she felt pretty hopeless. She wasn't sleeping well at night and had recently fallen behind in one of her classes. Her difficulties were multiplying.

Amy went through four years of college without discovering a field of study or work that she really loved. Matt, on the other hand, assumed he was going to law school after graduation—until he returned from a semester abroad at the end of his junior year. Being in South America changed him, he said, and he wasn't sure who he was anymore. He wanted to go back to South America to teach children living in poor areas. Part of him still wanted to earn money and have a comfortable life, like his parents, yet that didn't seem as satisfying as it once had. He tried to talk with his parents about these changes over the summer and again during winter break, raising the idea of at least waiting a year or two before applying to law school, until he was more certain of what he wanted. His parents were against waiting; they refused to support him if he went back to South America for a year to teach. Matt felt stuck and demoralized. He began seeing a therapist halfway through his senior year. He smoked marijuana a couple of times to relieve the tension he felt about his situation, as well as the

guilt he felt about not filling out law school applications. With his therapist's help, he was able to communicate his distress to his parents, and he decided to spend a year in New York City teaching English to Latino children.

Although Matt did not see his marijuana use as a problem, substance abuse is a serious problem for some students. Alcohol and drug use are embedded in adolescent and young adult culture, as individuals "experiment" with alcohol, drugs, and other risky behaviors. What factors make drug and alcohol use a serious problem on college campuses nationwide? This question will be explored in the next section.

DRUGS ON CAMPUS

In 1997, a freshman at the Massachusetts Institute of Technology died of alcohol poisoning a little more than a month after he arrived on campus.[2] He drank about 15 shots in an hour while pledging a fraternity. In 2004, a 21-year-old student at Minnesota State University consumed 16 shots in an hour the night of his 21st birthday. He was participating in a drinking binge known as "power hour"[3]—consuming 21 shots in an hour to celebrate reaching the legal drinking age. These students were among the 1,400 college students aged 18–24 who die an alcohol-related death each year.[4] This figure includes accidental deaths stemming from alcohol use, such as those from drunk driving, as well as deaths due directly to acute alcohol poisoning. In addition, many more college students suffer injury and illness due to alcohol use. Date rape often involves alcohol, as the perpetrator, victim, or both may be drunk at the time of the attack.

Drinking does not occur only at parties. Some students drink to relieve stress and overwhelming emotion. Lisa, a sophomore, suffered from severe generalized anxiety. Her legs would frequently twitch while she sat in her therapist's office, and her whole body reflected her immense anxiety. She reported drinking several beers per night in an effort to manage and quell the intensity of the anxiety. This helped her feel better at night, although she ended up feeling worse each morning. It also reduced her academic productivity, which concerned her. She used alcohol as a "medicine," and her drinking subsided when she began taking an antianxiety medication prescribed by a psychiatrist on campus.

Less obvious examples of students who drink for some form of relief include shy students who have a drink or two to increase their spontaneity and comfort in social interactions and harried students who drink to unwind from their whirlwind days. Students may use drugs other than alcohol for similar reasons. Illegal drugs such as marijuana, stimulants, and hallucinogens can be found on most college campuses. Furthermore, in a practice called "pharming," students

may take Ritalin or Adderall—prescription drugs used to treat attention deficit hyperactivity disorder—to increase their academic performance.[5] These drugs may help students stay focused and alert for longer periods of time, leading to more productive study sessions and perhaps to better grades. However, the drugs also have side effects; some, like dry mouth, are merely bothersome, whereas others, such as high blood pressure, are potentially more serious.[6]

The developmental, academic, and social stresses of college life yield an environment ripe for substance use. Other factors, too, may increase the likelihood that a college student will develop a substance abuse problem. A family history of substance abuse can increase risk. Also, just as younger adolescents do, college students may take drugs to rebel against parental and other forms of authority, to explore new or risky behaviors, and to fit in with peers. Consider the case of Sam:

> A junior in college, Sam had been smoking marijuana on and off since his senior year in high school. He first tried it out of curiosity, then continued because he enjoyed the way it made him feel—less self-conscious around other people and more euphoric and "tuned in" with his friends. He also liked the fact that his parents would disapprove if they knew about it. In college, he continued to smoke but did not see it as a problem. He stayed up late on nights when he smoked, and sometimes he chose to smoke and hang out with friends rather than keep up with his schoolwork. Since his freshman year, Sam's grades had slipped from mostly Bs to mostly Cs. He sought out a counselor when he had an adverse reaction to marijuana one day. His heart raced, his mind felt foggy, he believed his roommate was staring at him, and he felt a sense of impending doom. He met with the counselor only once, yet he told the counselor that he was quitting marijuana immediately because he couldn't stand this reaction. It scared him; Sam didn't know a person could feel this way "just from smoking pot."

Like many college students, Sam was uninformed about the effects of drug use, especially chronic use. While he recognized his adverse reaction right away, and it scared him, he didn't notice some of the subtler signs of use, such as changes in his sleep and study habits and ultimately his poorer academic record. Binge drinkers, too, often seem either unaware or unconvinced of the dangers of drinking large amounts of alcohol in a relatively short period of time. Even if they recognize the dangers, they may decide to ignore them for several reasons. They may enjoy the feeling of taking risks, or perhaps they feel a greater sense of invulnerability than is warranted. They may also believe that not conforming to social norms and peer pressure is worse than risking bodily harm. It's possible that they think their peers know how to look after them, as the 21-year-old student from Minnesota State University apparently did.[3] Clearly, substance use fills many social and emotional needs among college students and can represent a major problem for campus

safety. Food, too, can serve a variety of social and emotional needs. Combined with developmental factors, issues with food and eating can lead to eating disorders, a common diagnosis among college students.

EATING DISORDERS ON CAMPUS

There are three main patterns of disordered eating: eating too little (anorexia), eating too much (binge eating), and eating too much, followed by trying to rid the body of the food or calories (bulimia). Of these, anorexia can be the most frightening. The onset of anorexia "is often associated with a stressful life event, such as leaving home for college."[7] This may help explain why the average age of onset is 17 years, with peaks at ages 14 and 18 (p. 543).[8] Consider Joan's story:

> Joan began thinking she was overweight at age 16, when she compared herself to popular teenage actresses. She began a low-fat diet, lost a little weight, and felt great physically. She got a lot of compliments from her friends and classmates. She dieted on and off to maintain her new weight through the rest of high school. When she got to college, even though her weight was normal for her height, she worried that she was still too heavy to get a boyfriend. She began another low-fat diet and then gradually started reducing the amount she ate even further. She eliminated all forms of dairy, including low-fat dairy and anything containing cheese. She started having a small bowl of cereal without milk for breakfast, a "big" salad without dressing for lunch, and nothing or a piece of fruit for dinner. Eventually she was significantly underweight. When she examined herself in the mirror, she felt that her thighs and stomach were still too big and unattractive. She obsessed about tiny flaws. She lost more weight. Her friends had long stopped complimenting her, and her roommate was worried because she looked much too thin but still barely ate. Joan had stopped getting her period months ago and felt weak.

Joan didn't seek therapy because she was too thin; in April of her freshman year, she sought it because she was so unhappy, particularly with herself and her body. She hoped the therapist would be able to tell her how to lose weight even more effectively. Instead, the therapist thought she was dangerously thin and sent her to a hospital for a thorough medical evaluation. The hospital ended up admitting her for dehydration. Joan was placed on leave from college; she spent the rest of that academic year and the following one on leave, struggling to return to normal weight. Joan was fortunate in that she received good treatment and recovered. The long-term mortality from anorexia nervosa among individuals admitted to university-affiliated hospitals is over 10 percent, with starvation, suicide, and electrolyte imbalance being the most common causes of death (p. 539).[8] This mortality data is for true anorexia nervosa, which requires a 15 percent loss of body weight for diagnosis. Most college students exhibit milder but still serious forms of anorexia, and the disorder is more common in females than it is in males.

Individuals with bulimia—again mostly females—have repeated episodes of binge eating, and these binges are followed by an effort to rid the body of the excess food or calories. The binges feel out of control and scary. Vomiting, intense exercise, use of laxatives, or periods of severe calorie restriction between binges represent methods for eliminating or negating the excess food. Bulimia, like anorexia, involves a significant preoccupation with food, body size, and weight, although the degree of cognitive distortion of one's body size may be less with bulimia. Also like anorexia, bulimia can lead to a host of medical problems, including dental problems from vomiting.

College students with anorexia are easier to identify because they look emaciated. However, bulimia is more likely to become a community problem in a college residence hall. Roommates may notice that some of the food they keep in their rooms gets taken, even though they may not be able to say with certainty who took it. Vomit may be noticeable to others in a communal bathroom. This can be quite distressing for the residents of the hall, but again, they may not know who to approach about cleaning it up. Students with bulimia often feel a good deal of shame about their symptoms and try to hide their disorder. They delay seeking help, thinking they can handle it on their own. In other cases, students with bulimia may not be ready to commit to treatment because they fear gaining weight if they do. Resident hall advisors sometimes consult with university counselors because they have an unidentified bulimic student on their hall; the student's behavior, while hidden, is upsetting to others, and everyone feels frustrated about how to deal with the problem when the student in question refuses to seek treatment or is unknown.

Overeating, given all the food available to students in residence halls and nearby stores and restaurants, is common among college students. Food serves many purposes; it not only nourishes and fuels the body, but it may also provide comfort, feel good, and be associated with love, as when a student's mother bakes his or her favorite cookies right before the student goes home for winter break. Food is often part of social gatherings, and groups of students studying together may order in pizzas or bagels. Binge eating—a type of overeating that is characterized by (1) consuming a large amount of food in a relatively short period of time and (2) feeling out of control while it's happening—can leave one feeling disgusted, ashamed, or physically uncomfortable from the fullness. Because individuals with binge-eating disorder do not purge afterwards, they are prone to being overweight and thus may suffer from the health consequences of obesity.[5]

All three forms of disordered eating are associated with depression. Deb, a sophomore with bulimia, describes her feelings this way:

I feel so disgusted with myself. I'm fat, my thighs are horrible, I've got pimples, my hair is a mess. When I binge—usually by eating whatever is around, like chips, microwave popcorn, crackers, other snacks—I try to make up for it by eating very little the next day. I'll feel better for a little while, but then I get hungry, or I'll feel frustrated about something, and I'll binge again. I feel so incompetent and stupid. I can't do anything right. I don't have a boyfriend, but who would want to be with me? Nobody likes ugly, incompetent people.

Deb says all of this in a quiet, pained, resigned voice. She sought help from a therapist at the urging of her parents, particularly her mother, who was worried about her poor self-esteem. Feelings like Deb's are not limited to students with eating disorders, of course. Depression is common among the college-age population, and suicide is a serious concern on campuses nationwide.

DEPRESSION AND SUICIDALITY AMONG COLLEGE STUDENTS

Estimates of the rates of major depressive disorder in America vary, with the lifetime risk ranging from 10 to 25 percent for women and from 5 to 12 percent for men (p. 339).[8] The incidence in adolescent and adult females is two times that in adolescent and adult males, although the rates are equal in boys and girls before puberty. The highest rates of depression are reported in women and men aged 25–44 years, with the mid-twenties representing the average age of onset. A family history of depression increases risk, as major depressive disorder occurs 1.5 to 3 times more frequently among the first-degree biological relatives of a person suffering from the disorder than it does among the general population (p. 339).[8]

There is some evidence that the age of onset is currently decreasing (p. 340).[8] This has implications for college mental health services, as many undergraduate and graduate students are in their early and mid-twenties. Depression in college students can express itself in many ways. Consider just a few, described below:

Beth, a junior, came to the university counseling center because she had been feeling sad and depressed, with occasional thoughts of suicide. She was also worried about a 4-year-old half-sister who lives with her father and stepmother. Her father is an alcoholic; he emotionally and verbally abuses her when he is drunk. Beth wants to protect her little sister as well as herself but feels helpless.

Carl, a sophomore, came to the university counseling center because of his ongoing depressed mood. He is not interested in his classes or friends, and he has trouble falling and staying asleep. His father had died suddenly of a heart attack a few years ago, and subsequent to his father's death, there were three more deaths in Carl's extended family.

> Pat, a senior, came to the university counseling center due to worsening and daily suicidal thoughts. Her plan was to disguise her suicide as an accidental drowning. Only the thought of her mother crying kept her from doing it. She feels responsible for her parents' chronic marital discord, has never been involved in an intimate relationship, and has few friends on campus.
>
> Mary, a graduate student, reported a long history of depressed feelings; she needed help getting out of the "hole" she sometimes fell into and was worried about falling into repeatedly. By the time she sought services, her depression had already resulted in poor performance in several of her classes.

All four of these students arrived at college with a history of depressed feelings, although the feelings may have increased in intensity since their arrival. Pat and Mary take medication for their depression. Teenagers who take antidepressant medication in high school find that they can perform and function well enough to apply to and attend college once they graduate. Without the medication, their resultant poor functioning in high school may prevent them from participating in college life. Thus, university counseling centers are now seeing more students who come to college with preexisting conditions of depression and other mental disorders. The number of students who need treatment or follow-up services for mental health conditions has increased dramatically in recent years. In 2001, an increase in severe psychological difficulties was reported by 85 percent of the counseling center directors participating in a national survey.[7] In the decade between 1989 and 2001, furthermore, the following increases among college students were reported: the number of cases of documented depression doubled, the number of suicidal students tripled, and the use of psychiatric medications increased 15 percent, from 10 to 25 percent of college students.[9]

Having a preexisting condition is not the only reason for the increase in depression among college students. Other factors that increase the stresses and pressures college students feel, such as world events and economic trends, in turn may increase symptoms of depression and other mental disorders. A poor economy, for example, may affect students in several ways. It may increase marital discord in the student's family, or the student may feel guilty about the expense of college. A poor economy may also reduce the number of job openings available when the student graduates, thereby increasing anxiety about finding suitable employment. The examples of depressed students outlined above illustrate a variety of other environmental stressors that contribute to depression. These include alcoholic and abusive parents, chaotic family environments, and the death of a parent or other important person in the student's life.

The reasons that college students think about and sometimes attempt suicide are likewise varied and influenced by the times in which the students live.

A student with chronic depression may despair of ever feeling better or of ever overcoming the hardships he or she experiences on a daily basis. Another student may feel trapped by the pressures he or she faces and may see no other way out. A student may feel guilty or ashamed about something, even to the point of considering suicide. It's also possible that a student may feel overwhelmed by so much rage that he or she seeks to punish another person by attempting suicide. Regardless of the particular motivation, suicide is a serious problem on college campuses. During the fall of 2003, three New York University students independently killed themselves by jumping from tall buildings on their university campus.[10] The stories that receive wide publicity—such as the three N.Y.U. suicides—are alarming, yet they represent only a fraction of the suicides committed by college students. One survey noted that about 10 percent of college students report thinking seriously about killing themselves; for college students, suicide is the second leading cause of death and is responsible for the loss of about 1,100 lives a year.[11]

   Although it is impossible to identify all at-risk students, reaching as many of these students as possible through outreach and prevention efforts is crucial. The roommates or friends of a suicidal person, rather than mental health professionals, may be the first to learn of a dangerous situation. Indeed, sometimes roommates or friends seek university counseling services to consult about a third person, who may be severely depressed or talking about suicide. Unfortunately, these individuals are not always comfortable providing the name of the student in question. They may worry about betraying their friend's confidence, or they might be worried about making too big a deal of the situation, especially if the suicidal student downplays his or her concern. In this way, outreach designed to (1) educate the university community about depression and suicide and (2) increase familiarity with mental health services and personnel on campus can be lifesaving. Other efforts to identify and intervene with students at risk for suicide have been enacted by various universities. These efforts include the use of anonymous mental health questionnaires, encouraging faculty and staff to contact deans or university counselors if they notice signs of depression or troubling changes in a student's behavior, putting counselors in residence halls, and mandating counseling sessions for at-risk students.[12] It is important to note that the increased attention to the mental health issues of college students over the past few years has focused on undergraduates. Graduate students, in contrast, have received relatively little attention, even though they are often more isolated than undergraduates and are subject to enormous stress (e.g., intense competition, relative isolation in research laboratories, financial worries, and anxiety about employment).[13]

UNIVERSITY MENTAL HEALTH SERVICES: IMPEDIMENTS TO TREATMENT

Mental health services on a college campus are often conceptualized as a particular type of specialty within the field of clinical practice. This specialty encompasses three main factors. The first emphasizes the developmental and environmental aspects of colleges and college students. The second emphasizes the boundaries and context inherent in university settings, which are concerned primarily with education rather than with mental health. The third factor emphasizes the range of flexibility and scope of services needed to respond in different ways to different student or organizational needs.[14] Colleges and universities vary in the mental health services they offer to students and to faculty and staff as well. Some colleges provide assessment, consultation, crisis, and referral services only. Others provide treatment, either short-term or long-term, in addition to the services listed above. Unfortunately, it is true that university counseling centers cannot reach all of the students who potentially need mental health services. Some of the reasons for this are outlined below.

Stigma

For some people, therapy is synonymous with exploration and getting to know oneself better. For many people, though, therapy is associated with severe mental illness. Some students do not want to be associated with a service they think is for crazy people. These students might feel embarrassed or ashamed if someone they knew saw them walking in the door of the counseling center. They might not think their problems are serious enough to take up a counselor's time, or—for those students who are really struggling to function—they might not want to admit the extent of their difficulties to themselves. They might believe their symptoms indicate a personal flaw— laziness or ineptitude, for example—rather than an illness. These attitudes are present not only in the troubled student but are reflected by parents and peers as well. A parent might tell a depressed student who complains of not being motivated to complete schoolwork that the student should get a grip and try harder. Friends might worry about confronting a depressed student because they don't want the student to think they believe he or she is crazy or weird. In other words, a lack of understanding of mental disorders is prevalent in American society; the stigma associated with depression and other mental disorders is also embedded in society.

Societal change comes slowly. There is both greater understanding of mental disorders and greater acceptance of the need for treatment of these disorders than there was a generation ago, and the children of today's college students may

feel more comfortable about therapy than their parents did. However, educating the university population through pamphlets or Web sites about depression and anxiety, eating disorders, and substance abuse may make it easier for some students to see past the stigma and seek treatment. It also may make it easier for roommates, friends, and professors to approach students and encourage them to seek help. Advertising the university counseling center as a casual place where students can ask questions, discuss a problem, or receive help for depression likewise may help students feel more comfortable walking in the doors, even if they are still concerned that someone might see them.

Fear

Another factor that keeps students from utilizing university counseling services is fear. Some might have had unpleasant or unhelpful experiences with therapy in the past, and they may be skeptical or leery of being in therapy now. They may be afraid of taking medications or of finding out that they are truly suffering from a serious condition. Students who have never sought mental health services before may be unaware of the confidential nature of most services. They may be scared to come for treatment because they think their parents or professors will find out. Students sometimes decline referrals for private therapy for this reason; they don't want the insurance statements or therapist's bills to end up in their parents' mailbox. Other students worry about having a mental health record; they fear it will somehow hurt their employment prospects.

Educating the university population about confidentiality policies and the circumstances under which confidentiality is broken may help some students realize their fears are far-fetched, thereby increasing the likelihood that they will obtain help. When it is necessary to involve parents or others in a student's treatment—when a student is seriously suicidal or requires hospitalization, for example—offering to help the student communicate with his or her parents may alleviate some of the fear.

The Nature of Mental Illness

Sometimes it is the student's symptoms themselves that prevent him or her from getting needed help. A student in the midst of a manic episode, for instance, may report feeling energized and euphoric rather than troubled. A student with paranoid thinking may not trust mental health personnel, among others, and therefore will not pursue counseling. Ann, a sophomore, saw a therapist only after being persuaded to do so by her academic advisor. Consider the reasons she gave for not seeking help sooner:

> After being in treatment for three months and taking antidepressant medication, Ann's depressive symptoms improved significantly. She told her therapist that she didn't seek help on her own, even though she had thoughts about suicide at the time, because she didn't think anyone could help her or understand her. She felt hopeless, and that applied to treatment as well as to her schoolwork and other areas of her life. She also didn't have the energy. It would take a lot of effort to call for an appointment and then show up for it, she explained, and she just didn't have that energy, especially since she didn't think it would help anyway.

In this case, Ann's depressive disorder itself—specifically the depressive symptoms of hopelessness and exhaustion or lack of energy—prevented her from getting the treatment she needed to combat the disorder. Ann's situation highlights the important role played by others in the university community. A student may feel that it's useless to seek treatment, but roommates, friends, and particularly persons in a position of authority (such as professors and deans) may be able to convince the student to try it anyway.

Cultural Prohibitions among International Students

It is especially difficult for university counseling services to attract international students, and many international students do not receive help until a crisis forces someone else in the university community to compel the student to get treatment. As Dr. Richard Kadison, chief of the Mental Health Service at Harvard University Health Services, points out, "When the worries become overwhelming, international students are the last to seek help. It seems that talking about stress and its effects on health is an American phenomenon that many international students do not understand" (p. 64).[15] Students from some cultures may feel that having emotional problems represents a personal failure, and they may worry about shaming themselves and their families. Students from certain cultures may feel prohibited from talking about their families, their feelings, or other "private" matters, especially with people outside of their families.

Furthermore, language barriers may prevent some international students from obtaining counseling. Cultures that do not emphasize emotional expression may not have a lot of words for emotion concepts, and thus a student from such a culture may not know how to talk about what is happening to him or her. Other students may find it exhausting or difficult to talk for extended periods in English if it is not their first language. Finally, some cultures have "culture-bound syndromes" associated with them (p. 843).[8] For example, the *Diagnostic and Statistical Manual of Mental Disorders (DSM–IV)* defines a syndrome called "brain fag" as a "term initially used in West Africa to refer to

a condition experienced by high school or university students in response to the challenges of schooling. Symptoms include difficulties in concentrating, remembering, and thinking. Students often state that their brains are 'fatigued.' Additional somatic symptoms are usually centered around the head and neck and include pain, pressure or tightness, blurring of vision, heat, or burning (p. 846)."[8] Some of the symptoms of brain fag sound like those of depression or anxiety. The *DSM–IV* identifies 25 culture-bound syndromes. In addition to language barriers, the absence of any of these syndromes from counseling center pamphlets and advertising may lead international students to believe that the service providers will not understand or be sensitive to their concerns.

There are several ways that university counseling centers can try to increase access for international students. Students from other cultures may be more likely to seek services if they know there are counselors on staff who are fluent in languages other than English. Also, as suggested above, culturally inclusive pamphlets, Web sites, and other advertising may increase use by international students. Finally, universities often have special student centers that are geared toward international students, Latino students, or African American or Asian American students. Strong liaison relationships between counseling center staff and the staff of these student centers can facilitate needed referrals to the counseling center.

The impediments to treatment previously discussed—stigma, fear, the nature of mental illness, cultural prohibitions, inadequate funding, and lack of visibility—all pertain to the students in need of services. The following factors pertain to the counseling facilities themselves.

Inadequate Funding

Often, colleges and universities do not prioritize student mental health services, especially in difficult economic times. Inadequately funded counseling centers cannot hire the staff needed to serve the university population effectively. While increasing numbers of students currently need mental health services on campus, even those counseling centers with relatively large staffs may feel the strain of not being able to respond as fully as they would like to this demand. In one informal survey, university counseling center directors cited the lack of funds for adequate staffing as their chief complaint.[5] If a college student has to wait a long time for an appointment with a counselor, it is not only potentially dangerous for that student, but it is a turnoff as well. The student may be less likely to follow through than if he or she is offered an appointment within a couple of days. This is especially true for a student who was reluctant to contact the counseling center in the first place.

Several outside sources of funding have stepped in to ease the financial burden colleges and universities face in providing adequate mental health services. The Jed Foundation, for example, is a nonprofit organization whose mission is to reduce the frequency of suicides committed on college campuses. The organization is named for Jed Satow, a college student who at age 20 killed himself in the late 1990s.[11] The Campus Care and Counseling Act, furthermore, passed by the Senate in the fall of 2004, allocates $10 million in grants to college mental health services to "help with prevention of and early intervention with behavioral and mental health problems such as depression, eating disorders and substance abuse."[16]

Lack of Visibility

University counseling center staff serve dual roles. They are clinical practitioners for students and other members of the university community who need their services. They are also members of that community. On the one hand, they need to preserve the confidentiality and protect the boundaries of their treatments. On the other hand, they need to be engaged in the life of the campus. If counseling center staff are too isolated, the services they offer will be less visible to the students who need them. Faculty and other staff may also be less likely to refer students for evaluation or treatment if they perceive the counseling center as distant and uninterested in campus life. Printed and electronic media, such as brochures and Web sites, are of limited utility if the counselors themselves are nowhere to be seen. To maximize usage of mental health services, counselors need to attend to both roles.

CONCLUSIONS

College students seek counseling services for all sorts of reasons. A freshman might feel homesick or anxious about separating from her family and high school friends. A senior might feel lost and directionless, unsure of who he is and what he wants to do after graduation. One student might abuse drugs or drink to excess; another might binge on large amounts of food and end up feeling bloated and ashamed. Still others might feel depressed—unable to study or socialize—and some might feel dangerously suicidal. College students, whether struggling with developmental concerns or new or preexisting mental disorders, represent a particular clinical population, and college campuses represent a specialized treatment setting. Can university counseling services reach these students? Can they minimize the stigma and quell the fear that a struggling student might feel? Are they accessible to roommates, friends,

professors, and deans—those who might recognize that a student needs help even when the student cannot see it? Do they offer and advertise culturally sensitive and knowledgeable services? Are they adequately funded and visible on campus? By addressing the needs of college students and by intervening quickly and effectively, college mental health centers foster the intellectual, social, and emotional growth needed for a productive, fulfilling adulthood.

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Pedophile Priests: What Do We Know about Catholic Clergy Who Sexually Victimize Minors?

Thomas G. Plante

Since the mid-1990s, more than 130 people have come forward with horrific childhood tales about how former priest John J. Geoghan allegedly fondled or raped them during a three-decade spree through a half-dozen Greater Boston parishes. Almost always, his victims were grammar school boys. One was just 4 years old. Then came last July's disclosure that Cardinal Bernard F. Law knew about Geoghan's problems in 1984, Law's first year in Boston, yet approved his transfer to St. Julia's parish in Weston. . . . The St. Julia's assignment proved disastrous. First, Geoghan was put in charge of three youth groups, including altar boys. In 1989, he was forced to go on sick leave after more complaints of sexual abuse. . . . Even so, the archdiocese returned him to St. Julia's, where Geoghan continued to abuse children for another three years.

The affable Geoghan usually befriended Catholic mothers struggling to raise large families, often alone. His offers to help, often by taking the children for ice cream or praying with them at bedtime, were accepted without suspicion. That is how 12-year-old Patrick McSorley, who lived in a Hyde Park housing project, allegedly became a Geoghan victim in 1986. . . . According to McSorley, Geoghan . . . learned of his father's suicide and dropped by to offer condolences to his mother, who is schizophrenic. The priest offered to buy Patrick ice cream. 'Felt a little funny about it,' McSorley recalled in an interview. 'I was 12 years old and he was an old man.' Riding home after getting ice cream, McSorley says, Geoghan consoled him. But then he patted his upper leg and slid his

hand up toward his crotch . . . then he put his hand on my genitals and started masturbating me. I was petrified. McSorely added that Geoghan then began masturbating himself.*

> —Michael Rezendes and the Boston Globe Spotlight Team, *Boston Globe*, January 6, 2002

THE PEDOPHILE PRIEST CRISIS IN THE ROMAN CATHOLIC CHURCH

An incredible amount of media attention over the past several years has highlighted the "pedophile priest" crisis in the American Roman Catholic Church.[†] Beginning with the January 6, 2002, *Boston Globe* Spotlight Team investigative report,[1] this story was *New York Times* front-page news for 41 days in a row. Just about every newspaper, magazine, and television news show across the United States (and in much of the world) reported and commented on the many unfolding cases of Catholic priests who were accused of sexually abusing children and teens during the past few decades. Very few stories have received the kind of intense and sustained focus by the mass media and popular press for so long.

Many outraged citizens called for the immediate resignation or defrocking of not only the priests accused of such egregious sexual misconduct but also the various bishops, cardinals, and other religious officials who were responsible for supervising and managing these men and assigning them to their priestly duties.[2] A flood of lawsuits was filed on behalf of the victims and victim advocacy groups totaling well over a billion dollars in claims. Several Church dioceses across the United States, such as the one in Boston, threatened to go bankrupt by filing for Chapter 11 protection. Laws were quickly altered in many states to extend the

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[*] John Geoghan, 68, was murdered in prison during August 2003. Patrick McSorley, 29, committed suicide during February 2004. Cardinal Law, 72, resigned during December 2002 and is now archpriest of the Roman basilica of St. Mary Major.

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statutes of limitations so that additional victims could come forward with their accusations even decades later.

The clergy sexual abuse crisis also impacted the Roman Catholic Church in other countries as well, with similar accusations made against a number of priests and Church officials in Ireland, Australia, the United Kingdom, and elsewhere. Many Catholic Church leaders in these countries also had to contend with relentless and unflattering media attention, numerous accusations of victimization, and many lawsuits.

Catholics and non-Catholics alike have been furious with Church officials for not better protecting unsuspecting children and families from sex-offending priests. This is especially true since many Church officials knew of earlier incidents of priests abusing children yet chose to transfer these men to other unsuspecting parishes in different locations. Many have felt that the Church considered itself above the law and arrogant in the manner in which they handled these concerns over the years.[2] Many have suggested that the Church has lost its moral compass and authority. How could the public listen to Catholic bishops pontificate on topics such as unjust wars, the gap between rich and poor, sexuality, abortion, gay marriage, and other hot topics when the sexual abuse scandals were in the headlines? Calls for reform have also been voiced about other complex, challenging, and controversial issues with the Roman Catholic Church such as the prohibitions against women priests, married priests, and homosexual priests.[3] Energized new lay advocacy groups (e.g., Voice of the Faithful) emerged and grew very quickly. It is unlikely that the American Catholic Church has ever experienced a more difficult crisis.[1]

Given the recent media attention and crisis, it may be a surprise to hear that the problem of clergy sexual abuse among Catholic priests is not a new problem at all. In fact, the American media reported on this issue in fits and starts several times before the 2002 crisis in Boston. For example, throughout the 1990s it was well known that a sizable percentage of priests had sexually abused minors.[3,4] Books and articles had been published in both professional and popular press outlets about priest sex offenders. Several notable and sensational cases have dominated press attention in the past. These include the exploits of Fr. James Porter in New England as well as Fr. Gilbert Gauthe in Louisiana. Furthermore, comments about clergy sexual abuse were recorded hundreds and even well over a thousand years ago by the Church itself. For example, St. Basil (330–379) stated, "A cleric or monk who seduces youths or young boys . . . is to be publicly flogged. . . . For six months he will languish in prison-like confinement . . . and he shall never again associate with youths in private conversation nor in counseling them" (p. 183 n.49).[5] Therefore, sexual

abuse committed by Catholic priests is not a new story that only became public in the media storm of 2002.

The recent crisis, however, has drawn attention to the notion of or phrase "pedophile priest." Many have wondered about these men of the cloth who sexually violate children. What do we know about these "pedophile priests?"[6]

WHAT DO WE KNOW ABOUT "PEDOPHILE PRIESTS"?

The most comprehensive study of pedophile priests ever conducted was completed by the John Jay College of Criminal Justice in 2004 and was funded by the Unites States Council of Catholic Bishops.[7] The John Jay Report, as it has become known, was the most comprehensive and independent investigation of the problem of clergy sexual abuse ever conducted. In fact, it is reasonable to suggest that it was the most comprehensive independent investigation on the sexual abuse of children of its kind conducted for any major organization religious or otherwise.

The report concluded that 4 percent of Roman Catholic priests or other male Catholic clergy such as religious brothers and deacons have had a sexual experience with a minor (e.g., anyone under the age of 18) during the past 52 years with a total of almost 10,700 victims. The 4 percent figure translates into 4,392 clergy against whom credible accusations of child sexual abuse were made. It was also noted that 4.3 percent of these men were diocesan priests primarily working in pastoral settings in church parishes while 2.7 percent were religious order priests (e.g., Franciscans, Jesuits, Dominicans) who generally were not working in local parishes but rather in parochial schools, colleges, and universities, health facilities, and elsewhere.

The majority of the abusive behavior included touching minors inappropriately under their clothes (57%) with a sizable number of incidents involving oral sex (27%) and penile penetration or attempted penetration (25%). About half (51%) of the victims were between the ages of 11 and 14 with only 15 percent aged 16 or above. The vast majority of victims (81%) were male.

Unlike the most egregious cases frequently reported in the press, the majority of these clergy sex offenders had only one credible allegation of abuse against them (56%). However, 149 priests had more than 10 allegations against them, resulting in the reported abuse of 2,960 victims, or 27 percent of the total. Remarkably, only about 150 men accounted for almost 30 percent of all know sexual abuse cases in the past half century. These 150 serial offenders clearly accounted for much of the damage to so many children.

A large majority (almost 70 percent) of these abusive priests were ordained before 1970. The report concluded that most of the abusive behavior occurred in the 1970s and dropped significantly during the 1980s and 1990s.

WHY THE PHRASE "PEDOPHILE PRIEST" IS A MISNOMER

Although the term "pedophile priest" has received a great deal of media attention and acceptance in the general public, it does not truly inform people about the nature of the sexual misconduct. The *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition, or *DSM–IV*, published by the American Psychiatric Association, defines pedophilia as "sexual activity with a prepubescent child (generally age 13 or younger)" (p. 527). Unfortunately, the John Jay Report did not investigate the victims of clergy sexual abuse based on pre versus post pubescence [4,8]. Rather, they reported that 81 percent of victims were boys between the ages of 11 and 14. This age range would likely include many children from both pre- and postpubescent developmental stages. However, research conducted elsewhere and published in scholarly books and journal articles suggests that the majority of clergy sexual offenders do not victimize prepubescent children and are therefore not technically considered pedophiles. [3–8] Rather, they would be considered "ephebophiles," or adults who target teenage postpubescent youngsters. Ephebophilia may be considered illegal in most states, as well as a sin or morally wrong, but it is not considered a psychiatric diagnosis according to the *DSM–IV* noted above. Therefore, a substantial number of "pedophile priests" are not pedophiles at all. Perhaps a case example may well illustrate this point.

Case 1

Fr. A is a 50-year-old priest teaching at an all-boys Catholic high school. Fr. A serves as the school swim coach. Prior to and following swim meets, Fr. A massages his student swimmers. He has physical therapy and physical education training as well. Furthermore, he was trained in "spiritual massage" at a theological training institute. On one occasion, one of his student teenage swimmers gets an erection. Fr. A. decides to massage the student until climax. After an investigation, it appears that Fr. A had similar experiences with two other students during his 23-year career at the school. His three reported victims were all about 15 years old.

Fr. A is an ephebophile and not a pedophile. One might argue that these diagnostic differences are "splitting hairs" and do not ultimately matter. However, both research and clinical practice suggests that the difference between pedophilia and ephebophilia is very important in terms of diagnosis, treatment, and attending to possible risk factors for abuse. [9] First, the difference between these two groups of sexual offenders helps better inform which youth

population is most at risk. For example, the young altar boy may be less at risk than the teenage high school student for priests experiencing ephebophilia. Parents might worry about the safety of their 8-year-old altar boy son but be not at all worried about their 15-year-old son who attends a Catholic high school. These parents may not realize that their teenager might be at much higher risk for sexual victimization by priests than their young 8-year-old son is. Second, pedophilia has been found to be more resistant to treatment than ephebophilia. Therefore, all things being equal, the odds are that successful rehabilitation is more likely with ephebophiles than with pedophiles.[9]

The word "priest" is also somewhat of a misnomer as well. Catholic clergy who have been accused of sexual misconduct with minor children are not always priests. Many are religious brothers who may also take vows of obedience, poverty, and chastity but who are not ordained as priests. Therefore, they do not perform the Mass ritual and many other priestly duties. They might teach parochial school, coach sports, assist with Mass and other religious activities, and wear priestly attire. Some of the accusations have been made against deacons. Deacons are not priests and are often married men.

Thus, although the phrase "pedophile priest" has been used to describe the clergy abuse problem in the Catholic Church, a better phrase might be "sex-offending Catholic clergy." This new phrase is more accurate but perhaps not as catchy.

WHY WOULD A PRIEST SEXUALLY VIOLATE A CHILD?

The above statistics in the previous sections may shed some light on the frequency of sexual abuse by priests as well as provide some information about likely victims. However, these statistics tell nothing about what might be going on in the hearts and minds of sex-offending clergy. How could a man of the cloth, a religious, moral, and ethical leader, engage in such awful anwd harmful behavior with a vulnerable child? What do we know about the inner workings of these men? Years of both research and clinical practice provide some insights into the internal workings of the sex-offending clergy.

Sex-offending clergy come in various styles of offending.[10] Some are considered "situational" offenders. These men might describe themselves as primarily interested in adults as potential sexual objects of their desire (either heterosexual or homosexual attractions). They may be appropriately sexually attracted to adults whether they act on these attractions or not. They may not seek out children or teens to offend yet find themselves offending these youngsters during particular circumstances. These circumstances may include unsupervised access and closeness to potential victims, consuming alcohol or drugs, periods of high stress and

low self esteem, "falling in love" with a minor to whom they feel particularly close or connected, anonymous sex with strangers who they think are adults but are actually under age, and so forth. Another case example may prove useful.

Case 2

Fr. B is a newly ordained young parish priest from another country. He lives in a rural area with an elderly pastor in a church rectory setting. Most of the parishioners in his church are conservative elderly Catholics. He often feels lonely and isolated. During periods of stress, he finds himself driving to a major city several hours away where he engages in anonymous homosexual sex with other consenting adults. He reports feeling terribly guilty and distraught about this behavior. However, he feels somewhat compelled to do this every few months. On one occasion, his anonymous partner was a 17-year-old boy and thus not a legal adult. Police caught them in the act.

Fr. B is a homosexual who is attracted to other adults. However, during periodic anonymous homosexual sex, a minor was involved.

Other offenders are more "preferential." They prefer children as sexual objects and seek them out. They are generally not sexually attracted to adults at all. They may engage in "grooming behavior" by working to secure the trust of a child (and perhaps his or her family) over time before sexual victimization ultimately unfolds. These men may development friendships with the child and family, do favors for them, and shower them with attention, gifts, treats, and the like. After trust is well established, sexual abuse begins. Another case example illustrates a preferential offender.

Case 3

Fr. C find himself sexually attracted to young boys and girls around the age of nine. He enjoys cuddling and wrestling with them, attending church-sponsored camping trips and other outings, and helping out with the church youth group. Fr. C was accused of fondling several children during a camping trip. Fr. C has a long history of depression and alcohol problems as well. The children reported smelling alcohol on his breath during the victimization. Fr. C reports feeling uncomfortable with adults and finds himself sexually aroused by younger children. He often finds himself watching children on playgrounds and at fast food restaurants. He reports that this sexually arouses him.

Sex-offending clergy usually experience psychiatric comorbidity as well.[4,9,11] This means that they suffer from at least one psychiatric disturbance such as clinical depression, a personality disorder, substance abuse problems, addictions

of various sorts, or even brain injury. They often struggle with a range of behavioral, emotional, and psychiatric concerns. These additional disorders may make them more vulnerable to acting inappropriately with youth.

Information assembled from insurance claims as well as psychological reports and research suggests that sex-offending clergy tend to experience poor social skills, immaturity, social isolation, and low self-esteem. A sizable number come from troubled family backgrounds that included abuse and neglect when they were young.[8,9]

The overall profile suggests that priests and other Catholic clergy who sexually abuse children may do so for a variety of reasons, and they generally experience a number of personal demons that might contribute to their behavior. Although their psychiatric problems do not excuse their victimization of vulnerable children, it does help to better understand these men who abuse. In doing so, we are better able to evaluate, diagnosis, treat, and prevent abuse of children and teens.

Case 4

Fr. D worked as a parish priest in a very low-income setting in Mexico. He taught in a church school as well. Fr. D has a long history of personality and alcohol problems. He was sexually and physically abused himself as a child while living in an orphanage. Furthermore, when he was 10 years old doing some school-related volunteer work, he was sexually abuse by a priest who was working as a hospital chaplain. During a drinking episode with teens from the school, he sexually molested a boy. After an investigation, several other boys reported similar experiences with Fr. D. In total, about eight boys were abused by Fr. D during alcohol-related overnight trips. Fr. D reports that he is heterosexual in orientation but chooses boys because they are available and he has easy access to them. Furthermore, he is somewhat phobic about females, stating that they might get pregnant. Fr. D well illustrates that many sex-offending priests experience psychiatric problems that contribute to their abusive behavior.

HOW DO PEDOPHILE PRIESTS COMPARE TO NON-PRIESTS WHO SEXUALLY ABUSE CHILDREN?

Tragically, we know that sexual abuse of minors is also not limited to the behavior of Roman Catholic priests.[12,13] Although solid and reliable statistics are not easy to obtain, it is very clear that sexual abuse committed by male clergy is certainly found among Protestant, Jewish, Muslim, and other religious leaders. For example, the Anglican Church in Canada (and most notably, British Columbia)

has experienced a large number of credible accusations of sexual misconduct with minors against their non-Catholic priests. These accusations have led to press reports and lawsuits similar to those in the United States. Unfortunately, no equivalent comprehensive John Jay Report has been conducted or published focusing on other clergy groups. Therefore, reasonable estimates secured from lawsuits, police reports, available research reports, and treatment facilities are the best we can do at this point in time. While the Roman Catholic Church has easily received the most media attention, sexual abuse of minors exists at alarming rates among others who have access to and power over minors and who are usually trusted with the welfare of children (e.g., physicians, psychologists, social workers, school teachers, Boy Scout leaders, coaches, school bus drivers). For example, it has been well established that in mental health professions, between 1 and 7 percent of female professionals and between 2 and 17 percent of male professionals sexually exploit their patients.[14] These figures, however, predominantly reflect adult victims, and the prevalence of child and teen victims among these professions is too poorly researched to draw clear conclusions. Sexual abuse committed by people in the helping professions is all too common. Quality research, for example, has demonstrated that about 5 percent of school teachers have experienced credible accusations of child sexual abuse.[15] Sadly, sexual abuse of children and adolescents can be found in every area of the world and in every profession. Those who have trusting relationships with children and ready access to them can do the most harm. Those with a great deal of power and authority and with little accountability can do enormous harm to many, regardless of their religious tradition and role.

Furthermore, it has been well established from a wide variety of solid research studies that approximately 17 percent of all American women and 12 percent of American men report that they have had an unwanted and abusive sexual experience with an adult while they were still minors.[16] Amazingly, about one in six adult Americans reports that as a child or adolescent, he or she was sexually abused by an adult. Sadly, there is a great deal of sexual exploitation of minors by adults regardless of religious persuasion, profession, and role. Of course, we'd expect much better behavior from clergy than from the general population. Tragically, we must admit that the sexual exploitation of children is and perhaps always has been fairly common.

WHAT DO PEDOPHILE PRIESTS HAVE TO DO WITH HOMOSEXUALITY?

Since 81 percent of clergy abuse victims in the Roman Catholic Church are male, many have wondered about the role of homosexuality in the clergy abuse

crisis. In fact, some (including several bishops) have called for the elimination of all homosexuals from the priesthood in an effort to stop the sexual victimization of boys by priests. Some of these bishops, such as former United States Catholic Conference of Bishops president Fr. William Gregory, have made public statements that homosexual priests are at least partially to blame for the sexual abuse crisis in the American Catholic Church.[1] Official Catholic Church policy does not allow homosexual men to become priests. Vatican spokesman Joaquin Navarro-Valls recently reiterated this policy by stating that homosexuals cannot be ordained into the Catholic priesthood.[17] However, best estimates suggest that about 30–50 percent of Catholic priests and seminarians in America would describe themselves as being homosexual in orientation.[18]

Many seminaries, novitiates, and dioceses maintain a "don't ask don't tell" policy or do not enforce Church teachings in this matter.[19] This "don't ask don't tell" policy has led to the creation of a quiet gay subculture in the priesthood. A recent survey of 1,200 priests found that 55 percent recognized a gay subculture within the Catholic Church.[17]

Tragically, homosexual priests have become scapegoats in this area. Although the majority of clergy abuse victims are males, homosexuality cannot be blamed. First, many of the pedophile priests report that they are not homosexual. This is also true of many non-clergy sex offenders who victimize boys. Many report that they may target boys for a variety of reasons that include easier access to boys (e.g., working as a coach in an all-boys Catholic school), pregnancy fears with females victims, and more easily established trust and access with boys (and perhaps with their parents). Second, homosexuals in general have not been found to be more likely to commit sexual crimes against minors compared to heterosexuals. Sexual orientation is not predictive of sex crimes. Thus, eliminating all homosexual men from the Catholic priesthood would not stop a subset of men from sexually abusing minors.

WHAT DO PEDOPHILE PRIESTS HAVE TO DO WITH CELIBACY?

Thus far, no reliable research exists to conclude that Catholic priests are much more likely than male clergy from other faith traditions (or men in the general population) to sexually abuse children. Therefore, males who marry or engage in sexual relationships with consenting adults are not significantly less likely to sexually victimize children compared with Catholic priests. Furthermore, if someone could not have a sexual relationship with another person for any reason, such as religious vows, the inability to find an acceptable partner, or marital and relationship discord, children and teens would not necessarily become the object of his desire. Rather, consenting adults would. Thus,

allowing priests to marry would not eliminate the inclination of some of these men to sexually victimize minors.

In 1970, the two primary reasons for priests leaving the priesthood were because of disagreements with authoritative Church structures and their desire to marry. In 2000, the most prominent reason for leaving was a desire to marry, while institutional criticism was not a significant factor any longer. In a recent survey, 56 percent of priests thought that celibacy should be optional while 12 percent stated that they would likely marry if celibacy were no longer mandatory.[17] Overall, the current main reason for priest resignations and disagreements with Church policies is the issue of celibacy.[17] A recent poll in Boston reflects the beliefs of many Catholics. The survey found that 74 percent of Catholics in the Boston area disagree with the Church that priests should remain celibate.[20]

If Catholic priests could marry there would clearly be a significant increase in the potential pool of applicants to the priesthood. This would also be true if females could become priests in the Catholic Church. However, the increased number of priests would not necessarily eliminate the few men who have a predilection to sexually abuse minors. This is most evident in the fact that most sex offenders in the community are not priests at all and are often married men.

WHY HAS THERE BEEN SO MUCH ATTENTION ON SEXUAL ABUSE BY PRIESTS?

If priests are not more likely to sexually abuse minors than men from the general population or clergy from other faith traditions, then why has there been so much relentless attention on sexual abuse committed by Catholic priests and little if any attention to abuse perpetrated by other male clergy members or other respected groups in society? There are a variety of important factors that likely contribute to the laser beam attention the American Catholic Church has received regarding this awful problem. First, about 25 percent of the American population identify themselves as being Roman Catholic.[21] Additionally, many people (both Catholics and many non-Catholics alike) have received elementary, secondary, or university education through Catholic schools, colleges, seminaries, and universities. Furthermore, over 7 million Americans per year receive social and medical services from Catholic Charities, while Catholic hospitals are the largest nonprofit health care provider in the United States, with over 800 facilities treating over 70 million patients each year.[22] This figure alone represents almost one-third of the entire American population! Therefore, an enormous subset of Americans have had or continue to have direct contact with priests, other Catholic clergy such as religious sisters and brothers, and the Catholic Church in general in at least some capacity regarding education, health care, social service, or spiritual matters. Because of

the large number of people affiliated with the Catholic Church and its social, educational, medical, and religious services and programs, many people either personally or professionally interact with the Catholic Church and Catholic clergy including priests. Therefore, they are more likely to be interested in and focused on these concerns among a group that they have had personal experiences with in the past or present.

Second, the clergy abuse crisis in the American Catholic Church is a crisis of priests (including religious superiors such as bishops making decisions about wayward priests under their charge) behaving very badly.[23] This includes the behavior of priests and other male Catholic clergy (e.g., brothers, deacons) who have sexually abused minors the behavior of Church leaders such as bishops for inadequate supervision and terrible decisions regarding how to best manage priests who behave in awful ways. Furthermore, the problem seems, on the surface, so easily preventable since it is a behavioral problem that is so obviously wrong, immoral, illegal, and against priestly vows. Additionally, no one would expect this kind of horrible behavior to occur on the part of a moral and religious clergy member and leader in the community. Before the media attention regarding sex-offending clergy, a priest was perhaps the last person on earth one would expect would be a sex offender. In general, we also would expect much better behavior from Catholic clergy than from clergy of other religious traditions who could be seen as being more "like us" because they are usually married. Priests appear to be much more removed from everyday life due to their commitment to chastity, poverty, and obedience, and they seem to maintain a special calling or relationship with God that one would expect might prevent them from engaging in sexually abusive behaviors with children or anyone. One has a very long way to fall if one is up high on a pedestal.

Third, the Catholic Church has had a long history of acting in a defensive and often arrogant manner regarding this and many other issues.[3] The defensive and arrogant posture has likely contributed to both Catholics and non-Catholics alike becoming furious with the Church and its leaders. In many cases, Church officials have not treated abuse victims and their families with concern and compassion.[2] This inability to be pastoral has led victims and victim advocacy groups to become enraged with the Catholic Church and its leadership. Many religious superiors such as bishops have not managed so many of these cases very well. For example, Cardinal Bernard Law of Boston was accused of allowing priests who had allegations brought against them to continue to serve in the Church in a variety of parishes for years without informing these churches of the allegations.[1]

Fourth, unlike most other religious traditions and most secular organizations in the United States and elsewhere, the Catholic Church does not use lay boards of directors to hire, fire, and evaluate priests or other Church leaders. Local bishops

(as well as other religious superiors) do not have to answer to local boards, community members, or even to each other. They must answer individually to the Vatican, thousands of miles away, which is often preoccupied with the many needs and challenges of the world's 1 billion Catholics in just about every location on the globe (with 80 percent now below the equator). Furthermore, bishops and other religious superiors are not elected to their jobs with any kind of democratic process but are assigned. These assignments do not come with term limits and are not subject to renewal by the local lay community. Therefore, if a particular religious superior such as a bishop makes terrible decisions about how to manage problematic priests or others, the Church does not have the checks and balances associated with most organizations that might help to nip in the bud potential problems. Bishops do not get fired or recalled for poor performance. Other than legal limits imposed by local, state, and federal laws, Church leaders do not have to please a variety of groups in order to remain in their position of power and influence. Each bishop must please (or at least not upset) his boss, who is located in Rome and will likely not be in touch with the day-to-day operations and decisions of so many bishops across the globe. Therefore, without useful checks and balances, problems can easily spread like a virus out of control.

The Catholic Church is by far the largest continuously operating organization in the world, representing 20 percent of the 6 billion people on the planet. It is not a small, insular, and obscure cult or church. It impacts billions of people. The Catholic Church has also assumed an ethical voice of moral authority for 2,000 years. The Church's often unpopular positions and standards on sexual behavior such as contraception use, sexual activity among the unmarried, homosexuality, and divorce make sex crimes committed by their priests even more egregious.[6,18] When priests err, sin, and fall from grace, it is perceived as a much bigger drop than for ministers from other religious traditions who are perceived as much more like the general population. The intriguing secrecy and inner workings of the Catholic Church also make the story of sexual abuse committed by priests fascinating and of great interest to the media and the general population.[1] Finally, many of the 25 percent of Americans who identify themselves as being Catholic often have mixed feelings about their Church. Many of the millions of Americans who have experienced Catholic education or were raised in the Church have stories of priests and nuns who were overly strict and difficult to deal with. Many have felt that they couldn't measure up to the impossibly high standards of the Church. Perhaps the Gospel verse attributed to Jesus—"He who is without sin may cast the first stone"—is a poignant perspective of the media and public's view on clergy sexual abuse. Those who present themselves as being morally superior to others find the fall from grace much more notable than the fall by average persons.

WHY CAN WE BE HOPEFUL?

One of the striking findings from the John Jay Report was the fact that the bulk of clergy sex offenders were ordained around 1970.[7] The vast majority of the priests accused of sexually abusing children during the past 50 years tend to be in their late fifties and sixties and the reported abuse occurred over 20 years ago. Although sexual abuse committed by priests and others has occurred for centuries and, sadly, will not stop immediately or in the future, the best available data suggests that there may be a cohort effect about priests who were ordained around 1970 that puts these men at higher risk for offending minors.

Why would this be so? There are several factors that likely make these priests more vulnerable for sexual transgressions. First, many of these men, like generations before them, entered into religious life as teenagers. Thus, the majority entered seminary when there were still youngsters. They were unable to work through the numerous complex psychological and behavioral issues regarding sexual development, maturity, and expression that others are more likely to work through. Issues about sexual development and expression as well as impulse control matters were usually not really evaluated or discussed before entering seminary or even introduced once they entered religious life. If a seminarian had concerns about anything sexual, he was often told by his superiors to take a cold shower, work hard, and pray.

These young men also entered seminary during a highly remarkable Church and cultural upheaval centered around both Vatican II and the sexual revolution in the United States. It seemed that up was down and down was up during these tumultuous times. Furthermore, there was a great exodus from seminary during the late 1960s and early 1970s with 1973 being the peak year of priests and seminarians leaving their vocation. It was a major turning point in the history of the American Catholic Church as well as in America itself. Traditional boundaries, rules, and expectations were broken overnight. For example, research suggests that about 23 percent of male psychotherapists were sexually involved with at least one of their patients during these years.[24] This figure is closer to 2 percent today.[25] Overall, it is not a surprise that the majority of those accused of sexual misconduct are priests who are elderly men who committed their offenses around 1970. If this cohort theory is correct, then we can expect a much lower proportion of new abuse cases both now and in the future.

NEW CHURCH POLICIES AND PRACTICES

Long before the clergy sexual abuse crisis in Boston and elsewhere hit the press in 2002, many significant changes had already occurred in the selection

and training of priests to help minimize clergy sexual abuse from occurring. First, entering seminary students have gotten much older in recent decades, with the current average age of entry being about 30.[26,27] Many of these men have had successful and satisfying intimate relationships and have grown and matured in many areas of their lives before entering religious life. Seminaries, dioceses, and religious orders now routinely hire well-qualified psychologists to conduct complete psychological testing evaluations for those seeking admission to seminary. Criminal and other appropriate background checks are now standard operating procedures for applicants as well. Seminaries now offer training in sexuality, strategies for maintaining appropriate professional and sexual boundaries, and ways to best manage impulse control–related problems and issues. Troubled seminarians and priests are usually quickly referred for evaluation and treatment by their religious superiors when symptoms first emerge. None of these changes were in place for earlier generations of priests.

The current crisis has forced all dioceses to follow new national guidelines from the United States Conference of Catholic Bishops about managing clergy sexual abuse allegations as well as procedures for the evaluation and treatment of both abuse victims and perpetrators.[28,29] Religious orders have followed suit as well. All dioceses and religious orders now have committees comprised mostly or entirely of laypeople that evaluate and consult on allegations of clergy misconduct. Many of these committees now include women, parents, victims of clergy abuse, and people who have a great deal of professional expertise in child sexual abuse such as psychologists, psychiatric nurses, police officers, criminal or family lawyers, and so forth. Many of these committees also include non-Catholics. Although these committees are advisory to the local bishop or religious superior, Church leaders would be foolish if not crazy to ignore the collective wisdom of these multidisciplinary group members. Finally, recent comprehensive research such as the John Jay Report provides the much-needed information to help better inform prevention and future policy decisions to protect children.[7] While these needed changes cannot entirely eliminate the possibility of child sexual abuse committed by priests, they are enormous movements in the right direction that will at least minimize the possibility of future abuse.

THE AWAKENED LAITY

The recent clergy abuse crisis has awakened the sleeping American Catholic laity. Groups such as Voice of the Faithful (VOTF) are a case in point. VOTF began as a grassroots organization of Catholics in the Boston area following the 2002 clergy abuse crisis in that diocese. It very quickly grew to member branches across the United States and around the world. It now includes over 40,000 members across the globe. The rapid growth, influence, and engagement

of VOTF have been remarkable. Historically, the American Catholic Church has often experienced a fairly passive and uninvolved laity. Church policies that maximize decision making among the clergy and only offer minor advisory roles for the laity have not encouraged very active involvement and interest among average Catholics. The recent abuse crisis resulted in the laity getting assertively involved with the Church. This is very good news since it provides at least some degree of checks and balances to Church authorities and a lively, active, and involved laity can only be ultimately productive for the Church.

WHAT IS NOW IN THE LIGHT MUST STAY IN THE LIGHT

Now that the problem of clergy sexual abuse and words such as "pedophile" and "ephebophile" have become household words, it is almost impossible for priests to find themselves in situations where sexual abuse can easily occur. Parents, church employees, and the public are much less trusting of priests being alone with a child or teen. Policies have been developed that no longer allow priests to have unlimited and unsupervised access to children. A priest or bishop would be unreasonable in this day and age not to ensure that all children are safe in the company of priests. Furthermore, the media, VOTF, and others are watching much more closely now. In a nutshell, priests simply don't have the kind of unlimited trust and access to children that they once had. This is unlikely to change in the foreseeable future. We clearly live in different times and with different sensitivities. Now that the spotlight has been pointed on clergy sexual abuse, these issues cannot be hidden any longer. We have come to realize that some priests and bishops behave badly, and we won't forget that the priesthood, like all human groups, is not immune from troubled men who can inflict harm on others.

CONCLUSION

Church leaders could have done more over the years to prevent sexual abuse committed by priests from occurring. This is true in the now-famous Boston case that sparked the frenzy of attention on this problem in 2002. Victims and their families could have been treated with more care, respect, and compassion as well. Offending clergy could have been treated quickly and relieved from any duties that placed them in unsupervised contact with potential victims. However, the American bishops, with Vatican approval, now have policies in place to better respond to allegations of clergy sexual misconduct and to prevent at-risk clergy from having access to vulnerable

children and others.[28,29] The media focus on sex-offending clergy has acted as a catalyst to examine this terrible problem more closely and to develop interventions at both individual and institutional levels. The problem of sex-offending clergy is certainly complex and lacks simple answers. Yet, at stake is the moral and spiritual authority of the Roman Catholic Church as well as the health and well-being of countless priests and laypersons. Hopefully, the Church will get it right this time and perhaps be a model for other organizations to create a climate and environment where sexual abuse of children won't happen.

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Specific Phobia: A Common Problem, Rarely Treated

Christine D. Scher, Dana Steidtmann, David Luxton, and Rick E. Ingram

Webster's New Universal Unabridged Dictionary defines a phobia as "a fear or anxiety that exceeds normal proportions or that has no basis in reality; an obsessive or irrational dread" (p. 1082).[1] Although useful, this definition does not fully capture the nature of phobias as understood by most mental health professionals. Indeed, when defining categories of emotional distress, mental health professionals tend to rely upon widely used classification systems that are based on careful study of various phenomena. One such widely used classification system is the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM–IV).*[2] This official classification system of the American Psychiatric Association provides criteria that are used to diagnose a wide range of mental health problems, including phobias. Although the *DSM–IV* defines many different types of phobias, including agoraphobia and social phobia, the focus of this chapter will be specific phobias, one of the most common forms of psychological distress.

According to the *DSM–IV*, specific phobias are characterized by "marked and persistent fear of clearly discernible, circumscribed objects or situations" (p. 405). There are several different categories that the *DSM–IV* identifies as evoking phobic responses: animals, natural environments, blood-injection-injury, situational, and other. When exposed to the feared object or situation, a phobic person will almost always experience anxiety. Thus, in many cases, phobic persons simply avoid the target of their fear. In addition, in order to be diagnosed

with specific phobia, a phobic person must experience some disruption of his or her normal functioning or must be upset about having the phobia.

The various categories of specific phobias deserve further discussion, as they convey the breadth of the problem as well as suggest the personal toll that phobias can take. The first category, animals, includes all manner of living creatures. People with fears of spiders, cockroaches, and bees fall into this category, as do people fearing snakes and lizards. People fearing rats and mice are also included, as well as those who fear dogs and cats. The category of natural environments includes fears of all aspects of nature, including water, lightning and thunder, tornadoes, earthquakes, and heights. The blood-injection-injury category includes situations such as having blood drawn, receiving an injection (or watching someone else receive one), and viewing an open wound. Excessive fears of medical procedures would also be included in this category, as would hearing or participating in discussions of medical procedures. This latter group of phobias is rather unique in that it often elicits a physiological response in which heart rate increases, followed by a drop in heart rate and blood pressure and subsequent fainting.

The situational category includes experiences that are not necessarily part of a natural environment. This category includes various forms of transportation such as buses, airplanes, and subways, as well as tunnels, bridges, elevators, and enclosed places. People who are commonly called claustrophobic would fit here. In Southern California, a not uncommon phobia involves fear of driving on freeways, and thus, also fits this category of phobic experiences.

The final category is what is leftover and includes objects or situations that do not fit neatly into any of the previously discussed categories. Examples include fear of clowns or other costumed people, fears of choking, vomiting, or being unable to breath, and fears of loud noises. As should be apparent from this discussion, there are myriad objects and situations that may be the focus of specific phobias. Moreover, extreme fear upon encountering such phobic objects, or avoidance of these objects, has the potential to be quite impairing—a topic we discuss next.

ARE PEOPLE REALLY IMPAIRED BY PHOBIAS?

An Internet search using the word "phobia" quickly reveals that specific phobias have the capacity to negatively affect the lives of those who suffer from them. Web sites have been developed to help address the needs of people with fears of flying, needles, and dental procedures, among others. The impact of phobias is also reflected in the scientific literature. Several recent case studies (i.e., studies of individuals) have emerged that report on the impairment specific

phobias can cause. For example, one report focused on the blood-injection-injury phobia of an airline pilot. Although the pilot had had previous symptoms indicative of such a problem, she sought treatment only after fainting while on duty, as coworkers discussed a medical procedure. She was not permitted to return to work until her phobia was successfully treated with behavior therapy.[3] This type of therapy will be discussed when we talk about treatments for phobia.

Another report focused on an elderly man who developed a phobia surrounding his implanted heart defibrillator. After receiving his third defibrillator, the man reported symptoms of anxiety and depression as well as concerns about his defibrillator discharging. He also began avoiding situations that he believed might lead to a defibrillator discharge, such as driving and walking. He was treated for his phobia with a combination of cognitive therapy and stress-management techniques.[4] These types of treatment will also be discussed.

A third report focused on a middle-aged man with a fear of heights. Because of this fear, the man avoided many situations, including elevators, stairs, and routes to work that involved bridges or other heights. Although the man had feared heights for 30 years, he sought treatment only after his fear decreased his enjoyment of a recent vacation to a hilly location and began to more severely impact trips to work. Like the previously described airline pilot, this man was treated with behavior therapy.[5]

We also personally know of cases where people are impaired by phobias. Several years ago, one of the authors worked with a talented graduate student. A paper they wrote was accepted for presentation at a scientific meeting in Hawaii. Only later did the author find out that the graduate student had a phobia, a fact that was revealed at the airport when she could not bring herself to board the plane. One might think that her phobia was a fear of flying, but it was not. She was claustrophobic and could not tolerate the idea that the airplane door would be closed and there could be no escape once they were flying over the Pacific Ocean. On a day-to-day basis, she found ways to deal with her phobia, but it also cost her a trip to Hawaii that the university had graciously agreed to pay for. To our knowledge, she never sought treatment for this problem.

Such case studies are supplemented by additional scientific work that examines, in large groups of people, impairment resulting from specific phobias. For example, one recent study examined the impact of having a phobia on life satisfaction. The study found that adults with specific phobia have less life satisfaction compared to those who did not have the problem. Phobias clearly do impair people's lives, but two additional points are notable. First, specific phobias were associated with a smaller decrease in life satisfaction when compared to several other disorders, including dysthymia (a form of depression),

post-traumatic stress disorder (PTSD; an anxiety disorder that develops in response to traumatic events), and social phobia (an anxiety disorder that centers around fears of social and performance situations such as attending parties, talking on the telephone, and writing in public). Second, only people who had a disorder in addition to specific phobia reported substantially decreased life satisfaction.[6] It is probably the case that people are able to successfully enough avoid feared objects that they can minimize disruption in their lives.

Another study examined the economic impact of simple phobia, a predecessor of the specific phobia diagnosis. Costs of disorder due to a variety of factors were examined, including the use of physician and nonphysician mental health professional services (e.g., the services of a family physician, psychiatrist, or social worker) and workplace difficulties. Simple phobia was related to an increase in use of psychologists' services. However, it did not affect service usage of other mental health professionals or physicians, nor did it affect productivity at work or rates of absenteeism. Other disorders examined, including PTSD, panic disorder (an anxiety disorder characterized in part by sudden bursts of fear), and agoraphobia (an anxiety disorder that often is seen along with panic disorder), resulted in greater economic costs.[7] Thus, although clearly problematic for many people, phobias are not associated with the extent of impairment that is seen in some of the other anxiety disorders.

The information just summarized suggests that specific phobias can indeed be impairing. However, in terms of decreases in life satisfaction and economic costs, there are several other disorders that have greater impact. Perhaps this is why two of the people presented in case studies did not seek treatment until many years after initially noticing symptoms. Indeed, many people with specific phobias do not seek treatment, despite the potential of these phobias to cause distress and impact functioning.

HOW COMMON ARE SPECIFIC PHOBIAS?

Two large-scale studies conducted in the United States suggest that specific phobias are not uncommon in the general population. The first of these, the Epidemiologic Catchment Area (ECA) study, examined the prevalence of simple phobia at five sites: New Haven, Baltimore, St. Louis, Durham, and Los Angeles. Based on data from the latter four sites, 11.3 percent of people met diagnostic criteria for simple phobia at some point during their lives. Persons identified as black had approximately double the rates of simple phobia compared to persons identified as white or Hispanic. Women had approximately double the rates

of simple phobia compared to men. When considering sex and ethnic or racial identity together, black women had the highest rates of simple phobia at 24.4 percent.[8,9]

The second study, the National Comorbidity Survey, also examined the prevalence of simple phobia. The percent of people who met diagnostic criteria for simple phobia at some point during their lives was identical to that of the ECA: 11.3 percent. Also similar to the ECA study, women had over double the rates of simple phobia compared to men. Moreover, this sex difference was apparent when examining rates of simple phobia over the past month. The study revealed that 5.5 percent of people met diagnostic criteria, with women having nearly four times the rate of simple phobia compared to men. With regard to ethnic or racial identity, being black or Hispanic was related to an increase in the number of phobias. When examining all groups, heights and animals were the most common types of fears.[9,10]

The consistent sex difference in rates of specific phobias is of particular interest to mental health professionals. Several possible explanations for this difference have been advanced. For example, men may tend to underreport their fears, perhaps in an attempt to conform to a stereotypically masculine gender role. Another possible explanation is that women are more likely than men to seek treatment for their fears. This explanation would also account for greater sex differences in samples of people seeking treatment compared to samples of people recruited from the larger community. Women may also develop specific phobias at increased rates due to greater opportunities to learn fear. For example, women may be more likely to see examples of other women acting fearfully (e.g., through television and film) than men are likely to see examples of other men acting fearfully. This type of learning, often termed "modeling" or "observational learning," can be quite powerful, as will be discussed later in this chapter. In sum, there are quite varied possible explanations for the sex difference in specific phobia, and additional research attention will likely be focused on this issue.[9]

WHAT CAUSES PHOBIAS?

An edition of a popular science magazine contained a full-page color photograph of an infant lying inside the loosely wrapped coil of a python. The baby looks comfortable and calm and shows no signs of the terrifying reaction that many people would feel in the same situation. It looks as though the baby doesn't even notice the snake. The image is striking, if not a little disturbing. Why isn't the infant afraid? Is it a digitally altered photograph? But in fact the photograph was *not* altered. Although it was a specially trained python,

the baby actually sat inside the snake's coil without any sign of fear. This is a dramatic example of how learning can affect the development of fears and phobias. Many of our fears are learned, and the young infant in the photograph had not yet learned the fear of snakes. In fact, learning appears to play a central role in the acquisition and maintenance of phobias. In addition, there are a variety of other components believed to play a role. Although many of the individual theories have been around for years, contemporary researchers are now attempting to integrate the various lines of thinking and research into a more comprehensive theory of phobia etiology. Before turning to this comprehensive approach, it is useful to describe the individual theories in more depth.

Learning Theories

For a good part of the last 50 years, learning has been a predominant theory of phobia etiology. Even before that, psychologists found out that they could create strong fear in children. One of the most famous examples is the experiment in the early 20th century involving "Little Albert," a young boy who was taught to fear a white rat. Initially, Albert showed no fear when exposed to rats. Then, he was repeatedly shown a white rat just before he would hear a very startling loud noise that made him cry. After multiple trials, he began to scream and cry as soon as the rat was presented, even if no sound was made—he now feared the rat itself, rather than the unpleasant sound.[11] Such an experiment could not be conducted today because it is recognized as unethical to create a phobia that was not present to begin with. Nevertheless, this experiment demonstrates that intense fears can be learned.

Since the Little Albert experiment, more specific details about how learning leads to phobias have been discovered, and several specific learning pathways have been proposed. For example, it has been suggested that, just as with Little Albert, fears can be learned through traumatic experiences with feared objects.[12] In some instances it may only take one or two negative experiences with an object for an intense fear to begin developing.[12,13,14] This has been referred to as a conditioning model because the fear is conditioned, or learned, through a negative experience.

Although the conditioning pathway is one way in which phobias begin to develop, it does not account for all instances of phobia acquisition. Many people with phobias have not had traumatic experiences with the feared stimuli. Thus, it has also been proposed that some phobias are learned vicariously.[12] That is, children may grow up learning from a parent, teacher, friend, or even television that certain things are to be feared. Thus, it has been proposed that

another pathway to phobia acquisition is learning fear through *copying* a fear someone else is displaying. This way of learning is often referred to as "modeling" or "observational learning." For example, if a child grows up watching a parent cross to the other side of the street every time a dog is approaching, the child may begin to avoid dogs in a similar fashion. Or if a child hears a news report about deadly spiders, the child may begin to display a fear of spiders. If the learning experience provokes enough fear or learning occurs repeatedly, it may eventually escalate into a phobic-level fear.[15] Of course, not everyone who has such experiences develops a phobia. This illustrates the point that it is necessary to examine how learning relates to other factors in order to more fully understand the origins of phobia.

Evolutionary Theories

The picture of the infant in the python's coil caused quite a stir. The picture was disturbing enough that some people wrote letters to the editor regarding the photograph; one person whose letter was printed in a subsequent magazine felt the photograph was in "poor taste." Apparently, looking at the picture made many people uncomfortable. It is likely that the picture was aversive because many of us have some fear of snakes; seeing a baby in such a vulnerable position makes us uncomfortable. If not snakes, perhaps we fear spiders, heights, or strangers. These are common fears among individuals without phobias, and, more interestingly, they are also common phobias.[13] When looking for similarities across these phobias, it is evident that most of the feared objects and situations are things that can actually be dangerous under certain circumstances. The observation that people frequently fear things that may actually be dangerous has led to theories about the evolutionary significance of phobias.

One such theory is that humans have become biologically prepared to more easily fear some stimuli than others because people who feared dangerous things such as snakes and heights were more likely to survive and pass on to their offspring the disposition to fear these things.[13] Although these fears are manageable for most of us, for some people the sense of fear is so strongly ingrained that it may reach the level of a phobia. Originally, this evolutionary idea was an extension of learning theories. It was believed that humans had become biologically prepared to easily learn some fears such that it might take only one scary encounter with a spider to develop a fear and avoidance of spiders. Recent research has suggested that we may actually be prepared to fear without any learning so that certain fears are actually akin to instincts.[16,17] The evolutionary theories of phobia origin appeal to many people on an intuitive level and are supported by research.[13,16]

Genetic Theories

The specific phobias are not believed to be as highly heritable as many other psychological disorders, including the other anxiety disorders. However, research indicates there may be at least a small genetic component that may predispose people to phobias.[18,19] Researchers believe that some phobias such as situational phobia and blood-injection-injury phobia can be directly inherited, while others, such as animal phobias, are more likely to be inherited via a general tendency to be fearful in a variety of situations.[20] For example, some infants have temperaments that make them more likely to withdraw from unfamiliar people or situations, and infants with this behavioral inhibition are more likely to develop a variety of phobias later in life than infants without the inhibition.[21] It is speculated that this temperament makes it less likely that the person will ever approach the thing he or she is afraid of and will thus miss out on the opportunity to disconfirm fear of that object. In a sense, he or she is always imagining the worst with no opportunity to amend that belief through positive experience.

Another way in which people may inherit a generally fearful disposition is by inheriting the tendency to feel a strong disgust reaction; some people have more intense disgusted reactions to blood or certain animals. Moreover, these reactions seem to run in families.[22] It is not yet known whether disgust is transmitted from parents to children through learning, genes, or a combination of the two. However, the disgust hypothesis is another possible way in which people may be genetically predisposed to developing phobias.

Other Biological Theories

In addition to the idea that people are genetically predisposed to developing phobias, recent research using the brain-imaging technique of functional Magnetic Resonance Imaging (fMRI) indicates that people with phobias show different responses to feared objects than people without phobias. When looking at pictures of feared things (e.g., spiders, snakes), individuals who fear these objects showed increased activity in the amygdala, a region of the brain that is widely believed to be important in human emotions.[22] Research also suggests that there is a "fast pathway" and a "slow pathway" through which fear responses travel to the amygdala.

Researchers believe it is through the fast pathways that people initially react to potentially dangerous stimuli in the environment and that the slower pathways are used to transmit conscious information in which people use reasoning abilities to deem something as threatening or nonthreatening. When working properly, the slower, more conscious pathway should have the ability to override

the fast, reactive pathway. However, in phobia there may be a dysregulation of the fear pathways and the amygdala so that conscious decisions do not successfully override the initial fear reaction and thus the fear reaction is abnormally maintained.[23]

Maintenance of Phobias: Cognitive Theories

Once a lower level fear begins escalating into a more phobic form, it appears that people's imaginations run wild in a variety of ways so that the fear is maintained and even exacerbated. If people do not confront their fear, then there may be a tendency to ruminate over it. For example, people with phobias may exhibit a bias in what they pay attention to that makes them excessively aware of anything that is related to what they fear.[24–25] Doing so thereby intensifies the emotions of fear and anxiety.[26] Imagine that a person with a phobia of heights is watching a newscast in which an accident involving a mountain climber is described. The phobic person is likely to pay disproportionate attention to the mountain climbing story, think about it continually, and thereby unintentionally strengthen the fear of heights.

Another way in which phobias might be maintained or made more severe is by always assuming the worst about things that are feared.[24] In this situation, someone with a spider phobia assumes that every spider encountered is highly poisonous rather than considering that it might not be poisonous. In fact, the latter belief is the more rational belief because the majority of spiders are not poisonous, but by their nature, phobias are not rational. Preliminary research evidence supports the idea that biased attention and biased interpretations are related to prolonging phobias.[26,27,28]

Integrating the Theories

It is evident that the process through which phobias develop involves a variety of factors. In essence, understanding how and why phobias develop is really a matter of understanding why people come to have fears and, more importantly, understanding why common levels of fear escalate into phobias in some people. As is the case with many psychological disorders, it is increasingly believed that "nature" interacts with "nurture" in the development of phobias. Genetics may make some people vulnerable to developing phobias, but these genetic vulnerabilities must also interact with life experiences before phobias actually develop. For instance, although the learning theories of phobia are widely recognized as important, it is important to consider that not all people who have traumatic experiences develop phobias from those experiences. This begs the question of why some people's learned fears become

phobias while other people's do not. It seems likely that the answer to this question lies in the fact that some people are more genetically predisposed to develop phobias. Therefore, it is the combination of the predisposition *and* the learning experience that leads to the phobia development rather than either of them individually.

Consider a person who does not tend to test out things she perceives as intimidating. If she witnesses a friend nearly drowning in a lake, her disposition might make her likely to avoid large bodies of water. Consequently, she will have few if any subsequent safe experiences near water and instead will continue associating water with the near-drowning incident. Her fear of water may continue to persist in her thoughts until it reaches a debilitating level and becomes a phobia. However, somebody who is more likely to confront her fears might return to the lake and thus have a "corrective" or more positive experience at the lake. Therefore, that person is more likely to circumvent the escalation of fear and avoid developing a phobia of water. This example is just one way in which the elements of thinking, learning, and genetics might interact. Researchers continue to consider and test other ways in which these individual factors interface in order to more fully understand the origin of phobias. In doing so, it may eventually be possible to prevent some fears from ever developing into phobias. Fortunately, until that time comes, effective treatments are already making it possible to greatly improve the quality of life for people with phobias. It is to those treatments that we now turn.

TREATMENT OF PHOBIAS

Many people never seek treatment for phobias. They find ways to cope with the phobia, often by avoidance. The person who fears water will simply not go to the lake, and the person who fears driving on freeways will take surface streets to his or her destinations. It is likely that treatment becomes viable only when the person is unable to find ways to avoid the feared object or situation, or when impairment or distress becomes intolerable. Even if not significantly impaired or personally distressed, some people may seek treatment when the phobia begins to negatively affect those close to the individual such as a spouse.

For the first two-thirds of the 20th century, those individuals who did seek treatment were treated primarily by psychoanalysis or other forms of psychodynamic therapy. These approaches considered intrapsychic and subconscious conflicts, mostly deriving from childhood, as the source of abnormal anxious states. The aim of these treatments was to bring the subconscious into awareness, analyze what it means, and supplant realistic appraisals for those that

produce the anxiety associated with phobias. Psychoanalysis and other related forms of psychotherapy, however, did not prove to be very successful in alleviating phobic symptoms. Freud himself acknowledged the limitations of pure psychoanalysis in treating phobias and suggested that active confrontation with the fear-producing object was necessary.[29] Indeed, the most effective treatments are those that involve exposure to feared objects or situations.[9,30] The underlying assumption is that repeated avoidance of a feared object or situation causes the anxiety associated with it to be maintained and perpetuated. Controlled and repeated exposure to the feared object or situation, however, is thought to desensitize the person to it while the person learns that the feared object or situation is not so threatening after all. Certainly this was the idea behind behavioral treatments for phobia.

Behavioral Approaches

Behavioral approaches became the predominate approach to treating phobia once it was realized that psychoanalytic treatment was not terribly effective. In particular, the 1950s saw a turning away from the focus on the subconscious in the treatment of phobias to behavioral treatments that focus on overt behavior and conscious experience. Based on learning theory, these treatments typically involve prolonged in vivo (that is, real life) exposure to fear-producing stimuli in order to recondition or desensitize an individual to such stimuli.

The first and one of the most popular behavioral treatments for phobias still in use today is *systematic desensitization,* which was developed by Joseph Wolpe in 1958. Systematic desensitization involves preplanned step-by-step exposure to imagined fear-producing objects or situations. The phobic individual is first taught procedures for physical relaxation, such as progressive muscle relaxation. Next, the individual is asked to rank situations related to the phobia that cause anxiety and distress. For example, a person who fears spiders might place physical contact with a spider at the top of the list of things that make him or her anxious, and the thought of a place that a spider may inhabit, such as a barn, at the bottom of the list. Then, the phobic individual is systematically exposed to the anxiety producing object or situation in a step-by-step fashion, beginning with the least anxiety-provoking situation to the most anxiety-eliciting ones. The phobic individual is instructed to relax during each step of the process such that a relaxation response is substituted for the fear response when thinking of the feared stimulus. If the phobic individual begins to experience anxiety at any stage, he or she is instructed to go back a step in the hierarchy and practice the relaxation procedures. This process is continued until all of the steps listed in the anxiety hierarchy have been successfully dealt with.

Although systematic desensitization with imagined stimuli is practical, a number of studies have suggested that systematic desensitization interventions conducted in imagination are not as effective as when combined with real-life exposure or compared to just real-life exposure.[31,32,33,34] Additionally, it is not clear why systematic desensitization works. The original idea, known as reciprocal inhibition, suggested that because the fear response is incompatible with relaxation, the two responses cannot coexist. Moreover, it was argued that with enough practice, relaxation supplants fear as the conditioned stimulus. More recent explanations, however, have suggested that learning relaxation may simply be a coping response that people can use when, for whatever reason, they must confront the feared object or situation.

Systematic desensitization can also be paired with *modeling*.[34] In modeling, the person observes other people (the "models") responding with relaxation rather than fear in the presence of the phobic stimulus. The models may be observed in real life or watched on film. The phobic person is encouraged to imitate the model(s) and thereby learn that the feared object or situation poses little real danger. The combination of live modeling with individual imitation is sometimes called participant modeling. Modeling is an especially popular technique for working with phobic children.[35,36]

Similar to systematic desensitization, *flooding* involves the person's experiencing of fear-provoking situations but with much greater intensity and for prolonged periods of time.[37] Because avoidance of the feared object or situation exacerbates the anxiety associated with it, the goal of flooding is to force exposure and prevent the avoidance response to the fear-producing situation. To accomplish this, the therapist, rather than the phobic individual, controls the timing and content of the imagined fear-producing scenes or real-life exposures. The therapist may also describe imagined scenes as graphically as possible in order to deliberately make them as disturbing as possible for the phobic individual. The prolonged experience with the fear-producing images or real-life exposures is thought to help the individual become accustomed to these images, so that the feared stimulus eventually loses its anxiety-causing effect. Although effective, given the intense nature of this treatment, some phobic individuals do not seek out this approach, and for those who do, some may not continue.

Although behavioral techniques differ on how gradually the phobic individual is made to encounter the fearful stimulus or how long the exposure continues, phobic individuals are typically asked to experience the situation until their anxiety begins to diminish. Equipment that measures pulse rate, respiration rate, and electrodermal response can be used to determine whether the phobic person is in a relaxed state before moving to the next step in the anxiety hierarchy in systematic desensitization. With each session, the phobic individual

begins to tolerate more intimate and prolonged confrontations with the threatening object or situation. Behavioral treatments can also be successfully applied individually and in groups, such as group systematic desensitization in the treatment of dental phobia.[37,38]

Virtual Reality Exposure

Virtual reality exposure (VRE) therapy is a relatively new and exciting alternative to traditional exposure-based interventions for specific phobias. Like conventional behavioral treatments for phobias, the central component of VRE is exposure to the feared stimulus. VRE, however, involves exposure to a computer-generated rather than an actual or imagined fear-producing stimulus. VRE treatments have been shown to be as effective as standard exposure therapy.[39,40]

In VRE, situations are presented as part of an interactive three-dimensional virtual environment that allows phobic individuals to become immersed enough to react to virtual scenarios as though they were real.[41,42] In order to create a realistic and interactive virtual environment, the user is typically outfitted with a head-mounted display that consists of separate display screens for each eye and stereo earphones. A head-tracking device that allows the virtual world to change with head and body motion adds to the realism of the virtual environment. In addition, VRE can be combined with tactile stimulation that furthers the realism, such as the feel of a steering wheel or a spider.

In VRE, the simulated phobic stimuli can be controlled and monitored by the therapist. Biofeedback instrumentation can also help the therapist to monitor the person's physiological responses.[42] For example, the scene might be one of walking on the roof of a skyscraper. If the phobic person's heart rate gets too high, the therapist can freeze-frame or stop the scene completely in order to help the individual to practice relaxation in an effort to counter-condition the fear and anxiety response. Furthermore, VRE is also efficient in isolating specific points of anxiety because the fear-producing scenarios can easily be repeated in the virtual environment.

Cognitive-Behavioral Approaches

Cognitive models of anxiety state that maladaptive patterns of thinking guide information processing such that a phobic person will be overly vigilant for and selectively attend to potentially threatening situations, misinterpret ambiguous situations as threatening, and preferentially recall threatening situations. These patterns of thinking are thought to maintain anxiety and avoidance by keeping threat situations salient. Thus, cognitive and cognitive-behavioral therapies (CBT) focus on these maladaptive patterns of thinking.

The goal is to help people change their reactions to their emotional arousal and also learn to deal effectively with anxiety-provoking situations. This process involves challenging maladaptive beliefs and reinterpreting the anxiety-provoking situation.[43] During the early sessions of CBT, phobic people are taught to self-monitor their thoughts, assumptions, and beliefs during anxiety-provoking situations. The therapist helps the person to understand the role of beliefs and appraisals in anxiety. During later sessions, phobic individuals are taught to reevaluate the validity of distorted thoughts and supplant them with more rational and adaptive ones.

CBT may be combined with relaxation training in order to provide phobic individuals with a strategy to reduce their symptoms in stressful situations. Also, CBT can be combined with in vivo exposure in the form of homework assignments. For example, a person with hydrophobia (fear of water) can be instructed to visit the city pool and report on the experience. Successful completion of the homework assignment can help the person to realize that he or she has control over reactions to stressful situations and that the situation is not as dangerous as originally thought.

Pharmacotherapy

There are a number of drug treatments in use today that are helpful for reducing anxiety associated with phobias. A class of antidepressant drugs called selective serotonin reuptake inhibitors (SSRIs) has been increasingly used to treat anxiety. SSRIs may work to increase the level of serotonin, a brain neurotransmitter that has been implicated in emotional disorders such as depression and anxiety. Examples of SSRIs that have been found to be especially useful in the treatment of phobia are Effexor (venlafaxine), Zoloft (sertraline), Prozac (fluoxetine), Paxil (paroxetine), and Luvox (fluvoxamine). The SSRIs are a popular choice because they typically have reduced side effects and very low addiction potential. Furthermore, the antidepressant action of these drugs is helpful in treating patients who suffer from depression in addition to phobia. Tricyclic antidepressants (TCAs) and monoamine oxidase inhibitors (MAOIs) such as Nardil (phenelzine) and Parnate (tranylcypromine) are also helpful but may also have more side effects. Antianxiety medications known as the benzodiazapines (e.g., Valium, Xanax) have also been used to treat phobias. The benzodiazapines are fast-acting drugs that reduce the symptoms of anxiety, but they have high addiction potential and are likely to cause withdrawal symptoms when stopped.

Another class of drugs called beta-blockers, used to treat high blood pressure and some heart conditions, has also been used in the treatment of anxiety disorders. Although the calming effect of beta-blockers may be beneficial for

some people with specific phobias, they are not likely to be used as a first choice of treatment. Also, there is now research that suggests that the drug D-Cycloserine, used mainly to treat tuberculosis, may be an effective treatment for diminishing the fear associated with phobias.

Other Treatment Approaches

Although the focus on subconscious experience in the treatment of phobias has been largely replaced by behavioral, cognitive, and pharmacological approaches, treatments for phobias that focus on the role of the subconscious mind are still in use today. Hypnosis, for example, has been used to help people with phobias control their reactions to fear-producing situations by helping them to control both physiological and psychological responses. Through posthypnotic suggestion, phobic individuals may be taught to physically relax and find a more tranquil state of mind. Hypnotherapy may thus help a person cope with the fear-producing situation in a calm and rational manner. Although lacking in scientific support, proponents of hypnosis claim it can be used to help a person with a phobia discover the memory of an originating event, a memory that has been repressed and relegated to the subconscious. Hypnosis might thus be useful for reexamining the event that initiated the fear, therefore helping phobic people to objectively understand their anxiety and reduce their fear of losing control in future stressful situations. However, research is still needed to determine whether this is actually effective.

Eye Movement Desensitization and Reprocessing, or EMDR,[44,45] is another technique that has been used in the treatment of phobias. EMDR is based on the idea that when a person encounters a fear-producing situation, the side of the brain that produces the emotional response dominates the other side of the brain. In EMDR treatment, people are instructed to focus on a fear-producing image, negative thought, and associated body sensations while simultaneously moving their eyes back and forth, following the therapist's fingers as they move across their field of vision for 20–30 seconds or longer. Although a focus on eye movements is common in EMDR, auditory tones, tapping, or other types of tactile stimulation have also been used. This process has been suggested to facilitate the integration of both sides of the brain (left and right hemispheres). It is important to note, however, that even though EMDR is used by some practitioners as a primary treatment or as an augmentation to other treatments, little scientific evidence is available to suggest that this is effective, or that it is effective for the reasons that proponents propose.[45,46,47,48]

Treatment: Conclusions

The outlook for people with phobias in the 21st century is an optimistic one. Although there is much variability across studies regarding the ideal duration of treatment, people with specific phobias can often be relieved of their symptoms in a matter of a few weeks. For some people, a single session of in vivo exposure lasting 2–3 hours can lead to significant improvement.[49] At this point, treatments that incorporate in vivo exposure to threatening stimuli are still considered the most effective. VRE, however, is very promising because it can be conveniently administered in traditional therapeutic settings and may therefore offer a more practical alternative to in vivo exposure.

Also very promising are the advancements in drug treatments that have led to more effective reduction of the anxiety associated with phobias. Drug treatments can also be integrated with the various forms of treatment for specific phobias. For example, people with fear of flying can benefit from both medication that reduces anxiety and in vivo exposure therapy that involves visiting an airport and taking a short flight. In addition, many of the therapies for specific phobias can be conducted as group therapy, which provides the benefit of interaction and support of the group as well as overall cost effectiveness.

CONCLUDING COMMENTS

The purpose of this chapter is to provide an overview of specific phobias. To this end, we have described this problem and examined how common it is, how it develops, and how it can be treated. We believe that this chapter's title truly captures the nature of specific phobias: they are a common problem, but they are rarely treated. Perhaps people with specific phobias avoid treatment because overcoming the fear seems daunting. For people who do seek treatment, however, the prognosis is good. Indeed, when considering the range of possible disorders and the range of possible psychological treatments, behavioral treatments for specific phobias have amongst the strongest scientific support for their usefulness.[50] For those interested in further reading about the nature of specific phobias and their treatment, as well as those interested in obtaining help for phobia-related distress, we have included a brief list of resources.

SPECIFIC PHOBIA RESOURCES

www.adaa.org. This is the Web site of the Anxiety Disorders Association of America. It includes information about specific phobias and a "Find a Therapist" link.

www.aabt.org. This is the Web site of the Association for Behavioral and
  Cognitive Therapies. Many members of this organization have an interest in
  scientifically supported therapies, including those for specific phobias. The
  Web site includes a "Find a Therapist" link.

The Anxiety & Phobia Workbook (3rd ed.) by Edmund J. Bourne, PhD. This self-
  help book contains an overview of anxiety disorders and their treatments, and
  provides methods of coping with anxiety symptoms. The book also includes
  self-assessments and numerous suggestions for additional reading.

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Conclusion: How Might We Prevent Abnormal Behavior from Occurring and Developing?

Thomas G. Plante

This book series has tried to bring the contemporary world of abnormal psychology and behavior to you in an informative, updated, and understandable manner. Hopefully, you have learned much about how abnormal behavior impacts all those around us including those we care most about. The book has tried to articulate what is currently known about a wide variety of abnormal psychology topics so that you will be much better informed about these issues that are often discussed in the news and elsewhere.

After reading and reflecting on these important topics, one might wonder what can be done to minimize, eliminate, or prevent these kinds of problems from occurring. There is clearly no simple answer to this question. There are a variety of reasons why abnormal behavior emerges and develops. Some are due to biological or physiological factors such as genetics, hormonal and biochemical influences, and the exposure to both legal and illegal substances. Others are due to internal psychological conflicts associated with personality, mood, and stress mechanisms. Still others are due to the interactions of many social and interpersonal relationships with loved ones, work or school associates, neighbors, and community members. There are many different roads that lead to abnormal and problematic behavior. However, this does not mean that we can't do much more to improve the odds that abnormal behavior won't develop within ourselves and others. We clearly can make a better world for ourselves and for society if we can follow some key principles of prevention. After reading this book series and

carefully evaluating the advice of many leading experts, several important princi-ples of prevention emerge as being especially important in preventing abnormal behavior from either developing or getting worse. While we cannot do justice to each prevention strategy articulated, we can at least introduce these seven prin-ciples to the reader. This list is not meant to be exhaustive or exclusive. It merely provides some very brief reflections and observations as well as prevention and coping principles.

AVOID ABUSE AND NEGLECT OF CHILDREN

As clearly articulated in several chapters of the series, the abuse and neglect of children occurs at alarming and disturbing rates. Abused and neglected chil-dren are much more likely to develop certain troubles with depression, anxiety, violence, substance abuse, interpersonal difficulties, and a host of other problem behaviors. Once developed, these problems impact others around them and can be passed on from generation to generation. Somehow, efforts must be increased to minimize child abuse and neglect. Public policy experts, child protection pro-fessionals, family attorneys, politicians, mental health professionals, and others must work closely to help children stay safe and to ensure that those entrusted with the welfare of children (e.g., parents, teachers, coaches, child care providers) are capable of providing the competent and effective care that children need, which is free from any abuse or neglect. While we can't totally eliminate child abuse and neglect, we can certainly try to minimize it by pooling our collec-tive resources and expertise making a firm commitment to the safety and well-being of all children. Like a lot of things, it will take a selfless commitment of time, money, and other resources to make significant progress in this area. It will involve working with many different community, civic, religious, educational, law enforcement, mental health, political, and other agencies. Perhaps as former President Nixon argued for a "War on Cancer" or former President Johnson's "War on Poverty," we may need a "War on Child Abuse and Neglect."

MINIMIZE POVERTY

Those who are poor are less likely to have access to professional mental and physical health care services and are much more likely to be impacted by the stress that is associated with poverty (e.g., unemployment, poor housing, and exposure to community violence). As poverty levels increase and the gap between the rich and poor widens, it is likely that the psychological and behav-ioral problems associated with poverty will increase. Therefore, efforts to reduce poverty will likely minimize the development of or the worsening of a variety of abnormal psychology problems. Again, politicians, business leaders, mental

health professionals, family advocates, and others must somehow work together in order to minimize poverty both here and abroad. Perhaps former President Johnson's "War on Poverty" needs to be waged once again.

MINIMIZE EXPOSURE TO VIOLENCE

Sadly, we live in an often highly violent world. Violence is not only perpetrated during wars and in street crime but also in the seclusion and privacy of one's own home. Domestic violence, child abuse, date rape, and other kinds of violence are all too common. Furthermore, research has clearly indicated that exposure to violence through entertainment sources (e.g., movies, video games) also increases the risk of both violence and other mental health–related problems among vulnerable viewers. The entertainment industry, politicians, mental health professionals, family advocates, and others must somehow work together in order to minimize violence exposure in entertainment, in the media in general, and in both public communities and private homes.

DEVELOP AND NURTURE EFFECTIVE AND AFFORDABLE TREATMENTS (INCLUDING PHARMACEUTICALS)

The development of quality and effective intervention strategies including pharmaceutical agents has the potential ability to greatly reduce the impact of abnormal behavior, assuming these options are available to all those in need. For example, medications such as Prozac and other selective serotonin reuptake inhibitors have revolutionized the treatment of depressive disorders during the past decade and a half. These medications, while not perfect or right for everyone with depression, have greatly improved the odds of effectively dealing with a number of psychiatric troubles including obsessive-compulsive disorder, depression, bulimia, and so forth. Recent quality research using empirically supported psychological interventions has also demonstrated remarkable results for a wide variety of abnormal behavior problems. Quality behavioral and psychological interventions for panic disorder, depression, eating disorders, post-traumatic stress disorder, and many other problems are available. Research and development on affordable medications and psychosocial interventions to help those who suffer from abnormal behavior offer hope to not only those afflicted with these conditions but also to those loved ones who suffer too.

However, medications in particular can often too easily be seen as a magic pill to solve all problems. Medications can also be extremely expensive in the United States in particular. A careful and thoughtful effort to make appropriate medications available to those who can truly benefit from them will likely help

to minimize the severity of abnormal behavior for not only identified patients but also for all those who are connected to them via family, work, school, or other relationships. The best available research and practice is needed to ensure that interventions that can help people with abnormal behavior are readily available and used.

ALTER CULTURAL EXPECTATIONS ABOUT BEHAVIOR

In previous decades, children rode in cars without seat belts and rode their bikes without bike helmets. Parents physically hit their children at will and in public. People were allowed to smoke wherever they wanted to do so. Women who sought to work outside of the home were considered odd or too bold. Cultural expectations about how we live our lives that have impacted social customs and expectations can be applied to abnormal behavior risk factors as well. For example, violence exposure, maintaining zero tolerance for child abuse, alcohol and other substance abuse, poverty, and so forth may help to create a society where abnormal behavior cannot flourish. Public policy can be used to help decrease the odds that abnormal behavior risks are tolerated. Cultural expectations and policy decisions can be used to ensure that those who experience particular problems seek appropriate resources. There is too often a social taboo to request help from mental health professionals about abnormal psychology related problems. This resistance and avoidance tragically often allows potential problems to become more severe and serious.

AVOID EXPOSURE TO ABNORMAL PSYCHOLOGY RISK FACTORS

While Americans demand individual freedoms, exposure to particular risks increases the chance of abnormal behavior of developing. For example, legalized gambling in some form (e.g., Indian gaming, lotteries, Internet gambling) is now allowed in just about all states and is certainly not confined to Las Vegas and Atlantic City. Bars and liquor stores are open and available around the clock in just about every city. Pornography and online gambling are available on the Internet and thus just about everyone who has a computer or can get to one can be exposed to these influences. These trends increase the odds that those who are vulnerable to developing certain abnormal problems (e.g., alcoholism, pornography, gambling) will do so. As I have heard many times, "An alcoholic probably shouldn't work as a bartender." Controlling the environment so that temptations are not available very easily would go a long way in minimizing the development of many abnormal behavior problems. Furthermore, vulnerable children and those with predilections to particular behavioral problems can all

too easily access materials that can contribute to further abnormal psychology problems. Therefore, being thoughtful about the environmental influences that increase the odds of developing problems later in life should make all of us more sensitive to these influences.

MAXIMIZE ETHICS—ESPECIALLY SOCIAL RESPONSIBILITY AND CONCERN FOR OTHERS

At the end of the day, somehow we all must find a way to live together, sharing the planet and its resources. If we have any hope of living in a world that is humane and just and where abnormal behavior and problems are managed better and minimized, we'll need to maximize our social responsibility and concern for others. The ethical treatment of all persons and our efforts to make the world a better place for all will hopefully prevent or at least minimize many of the troubles associated with abnormal behavior. A global effort to support ethical interactions among all may help us better live with social responsibility and concern for others.

While abnormal behavior is likely to be with us forever, there is much that we can do as a society to minimize the possibility that abnormal behavior will develop in at-risk individuals and groups as well as to help those who experience these troubles. Mental health professionals working with others including public policy leaders, industries such as the pharmaceutical companies, and experts in many other fields can help a great deal. Can our culture and society make the commitment to do this? Let us hope so.

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About the Editor and the Contributors

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Mental Disorders of the New Millennium

MENTAL DISORDERS OF THE NEW MILLENNIUM

Volume 2
Public and Social Problems

Edited by Thomas G. Plante

∞™

*Dedicated to my family patriarchs—
Bernard Plante, the late Henry McCormick, and
Eli Goldfarb—who have taught me much
about the human condition.*

Contents

Preface

Tragically, the daily news is filled with stories about significant and remarkable problems in human behavior. Each morning we are greeted with news reports about murder, suicide, terrorist acts, drunken driving accidents, child molestation and abduction, drug abuse, gambling troubles, gang violence, various criminal behavior, and so forth. Other frequent stories reported in the press involve the betrayal of trust among highly respected and regarded members of society. These stories include the legal, sexual, financial, and general ethical lapses of politicians, leading sports celebrities, and movies stars. Some reports include the sexual abuse perpetrated on children and teens by school teachers, coaches, and members of the clergy. Other stories focus on the stress-related troubles soldiers experience following their duty in war. Still others focus on more and more reports of what appear to be mental problems such as autism, dementia, attention deficit disorders, panic, eating disorders, and depression, among both children and adults.

These troubles are reflected in recent cover stories in magazine news weeklies such as *Time, Newsweek*, and *US News and World Report*. Problems such as attention deficit hyperactivity disorder, autism, Alzheimer's disease, depression, panic disorder, murder-suicide, eating disorders, and child sexual abuse, among others, have been featured many times over as cover stories in these and other popular media outlets. The fact that these topics appear frequently on the covers of these news weeklies means they must impact significant numbers of people.

Perhaps just about everyone in the United States is affected by mental illness and abnormal behavior to some extent. Many people either suffer from

one or more of the various mental disorders or live with those who do. It is likely that almost everyone in our contemporary society knows someone in his or her immediate family or circle of close friends and relatives who suffers from a significant abnormal behavior, psychiatric condition, or behavioral pattern that causes the person and his or her loved ones a great deal of stress.

Consider just a few of these statistics from our chapter contributors:

1. About 1 million people will die by suicide every year. The worldwide mortality rate of suicide is 16 per l00,000, or one suicide every 40 seconds. Fifty-five percent of suicides occur before age 44. Suicide is the third leading cause of death for both sexes.
2. About 1 million older Americans (1 in 35) is a victim of elder abuse each year, and between 3 and 5 percent of older adults over the age of 65 are or will be victims of abuse and/or neglect.
3. Epidemiological studies suggest the prevalence rate of child and adolescent depressive disorders ranges from 2 to 9 percent.
4. Over 18 million Americans suffer from some type of depression each year, and about 20 percent of the U.S. population will experience a significant depressive episode in their lifetime.
5. The number of probable adult pathological gamblers varies from just under 1 percent in the United Kingdom to between 1 and 2 percent in the United States and about 2.5 percent in Australia.
6. About 20 percent of all American women and 15 percent of all American men report being sexually abused by an adult while they were still a child.
7. About 4 percent of Catholic priests and 5 percent of school teachers have had a sexual encounter with a minor child in their care.

Clearly, mental illness and abnormal behavior touch the lives of just about all of us!

What's going on? How can it be that so many highly problematic psychiatric disorders, abnormal behaviors, and problems in living impact so many people? It wouldn't be an exaggeration to state that the vast troubles of the world stem from abnormal behavior. From ignoring global warming to terrorism, from murder to suicide, from divorce to gambling, from autism to dementia, it seems that abnormal behavior is at the root of so many challenges of our day.

Sadly, most of the books available in the field of abnormal psychology are not especially useful for the average educated lay reader. Much of the literature currently available tends to fall into two categories. The first includes academic books written by academics for an academic or scholarly audience. These books are often written in a very dry, jargon-filled, data-driven manner that is challenging for the general reader to get through. In fact, these books are often challenging for professionals in psychology and related fields to understand as

well. The second category includes trade books that tend to be very simplistic and often tell the story of someone suffering from a particular problem. These books are often located in the self-help or inspirational section in a bookstore. Books of this type are written by those who experience the particular disorder, mental health professionals who treat the problem, or journalists who tell a remarkable story about a particular case that made news. Very few books are written for the educated lay reader that balance academic, scholarly, and clinical information with a readable, engaging, and user-friendly style.

The purpose of this series on mental disorders is to help bridge this gap between academic and self-help /inspirational books written on abnormal psychology topics that impact society—those topics that potential readers see on the covers of weekly news magazines or in daily newspapers. The series focuses on contemporary abnormal behavior topics and is compiled from contributions by experts for an educated lay audience. Leading experts who study, treat, evaluate, and reflect upon these troubles and issues have been asked to write chapters for you to help you better understand these contemporary problems. The chapters are based on the most up-to-date research and practice evidence and go well beyond the information provided in popular media outlets. Hopefully, you will find that the books are highly informative, contemporary, and readable.

If we better understand the factors that contribute to these contemporary abnormal behaviors and patterns, then perhaps we can find better ways to prevent some of these problems from emerging and better evaluate and treat those who suffer from these experiences. In an effort to create a better world for ourselves and our children we must do all that we can to prevent abnormal behavior and help those who are troubled by abnormal behavior in themselves, their loved ones, and their communities. In doing so, we will be better able to create an improved world.

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Many people other than the author or editor assist in the completion of a book project. Some contribute in a direct way while others help in a more supportive manner. I would like to acknowledge the assistance of the people who worked to make this book idea a reality and who have helped me in both direct and indirect ways.

First and foremost, I would like to thank the contributors to this volume. Leading experts who represent the very best that the professional community has to offer graciously agreed to contribute quality chapters to this book project. Second, I would like to thank my associate editors, Drs. DeLeon, Kaslow, and Plante, for agreeing to serve as associate editors for this book and all the books in the abnormal psychology book series. Third, it is important to recognize the wonderful people at Greenwood who published this book. Most especially, many thanks go to Debbie Carvalko, our editor at Greenwood. Fourth, I would like to thank Santa Clara University, which has supported me and allowed me many opportunities to pursue my scholarly academic activities and interests.

Fifth, I would like to acknowledge the anonymous persons who are referred to in this book, who have allowed their life experiences and traumas to become instruments of learning for others. Sixth, I would like to thank my family patriarchs (Bernard Plante, the late Henry McCormick, and Eli Goldfarb) and matriarchs (Marcia Plante, the late Anna McCormick, the late Margaret Condon, and Marilyn Goldfarb) and my sisters (Mary Beauchemin and Leeann Sperduti), all of whom have taught me much about the human condition. Finally, I would like to thank my wife, Lori, and son, Zachary, for their love and support while I worked on yet another compelling book project.

Post-Traumatic Stress Disorder among U.S. Combat Veterans

Stanley Krippner and Daryl S. Paulson

The greatest weapon against stress is our ability to choose one thought over another.

William James

Traumas are assaults on the human mind or body that disrupt the typical functioning of such subsystems as the biological, psychoneurological, social-emotional, or spiritual-existential subsystems. Psychological trauma often leads to a constellation of psychiatric disorders that do not seem to mend, such as persistent anxiety and depression. Such a constellation, labeled *post-traumatic stress disorder* (PTSD), is described by the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (fourth edition, text revision) as a condition following the experiencing or witnessing of life-threatening events that exceed one's psychological coping capacity, emotional resources, and/or existential worldview.[1]

PTSD AS A SOCIAL CONSTRUCT

The term *post-traumatic stress disorder* is a socially constructed label that Western mental health workers have affixed to noticeable changes in someone's behavior, attitudes, and/or values following accidents, natural disasters, armed combat, rape, torture, or abuse. The putative causal incident can last a few seconds (as in the case of two automobiles colliding or a person shot by an unseen sniper) or several years (as in cases of spousal abuse or protracted armed insurgency).[2] When the person who suffers the trauma fails to recover, regain

equilibrium, or "get on with life," psychotherapists typically diagnose patients with PTSD as a way of describing this type of dysfunction following an assault on one's mind/body system (hence the term *post-traumatic*).

Definitions of the condition include the word *stress* as a reference to the irreparable or terminal impact of the catastrophic stressor, or event responsible for the symptoms. In other words, PTSD victims have never returned to a socially functional condition from their dysfunctional state.

In 1980, the American Psychiatric Association added PTSD to the classification scheme in its *DSM–III–R*. This was an important historical event in that it implied that the logical agent (the *traumatic stressor*) was outside the individual rather than an inherent, internal condition (as in *traumatic neurosis*) or a transient reaction to a stressful situation (as with *adjustment disorder*). PTSD is unique among other *DSM* diagnoses because it is the only psychiatric diagnosis with an identifiable cause. The traumatic stressor is given paramount importance; indeed, a mental health practitioner cannot make a PTSD diagnosis unless the patient has actually met the stressor criterion. Implicit in the diagnosis is the assumption that the patient has been exposed to an event considered so traumatic that it lies outside the range of "usual human experience," a 1980 description later modified because rape, severe accidents, and armed struggle are no longer considered "unusual."

For the diagnosis of PTSD to be made, a person's response to the event must involve intense fear, helplessness, or horror; in children the response must involve disorganized or agitated behavior. The characteristic symptoms resulting from extreme trauma, as specified in the *DSM–IV–TR* include:

> Persistent re-experiencing of the traumatic event, persistent avoidance of stimuli associated with the trauma and a cognitive-emotional numbing of general responsiveness, and persistent symptoms of increased arousal. The full symptom picture must be present for more than a month and the disturbance must cause clinically significant distress or impairment in social, occupational, or other important of areas of functioning. (p. 424)

Virtually all survivors of the Nazi Holocaust and the atomic bombings at Hiroshima and Nagasaki would be considered at risk for developing PTSD and its symptoms. The experiences responsible for PTSD retain the power to evoke panic, terror, dread, grief, or despair as manifested in daytime fantasies, traumatic nightmares, and flashbacks for years, decades, or lifetimes.

Although the term *PTSD* is a socially constructed label for a qualitatively distinctive internal experience, it involves phenomena that can be qualitatively measured.[3] Sometimes, it can be better understood as the result of histori-cally situated intersubjective transformations of value and meaning among

people, the nature of which differ from time to time and place to place. Each person's innate psychological capacity to handle stress varies; a situation may leave one individual with a PTSD diagnosis while others emerge from stress unscathed.[4] Some cultures reportedly have endured (and even thrived) amid strings of plagues, massacres, and calamities, while similar events devastate cultures that fail to develop the technological or psychological resilience needed for long-term survival.

Experiencing combat or other trauma does not always lead to psychopathology. Interestingly, suffering is a necessary, but not sufficient causative factor in PTSD. Some individuals and groups respond to distress with an understanding that their response is appropriate for the climate (be it war or natural disasters). For them, post-traumatic stress would be a pseudocondition. For example, the Buddhists Nargarjuna and Chandrakirti, in developing the Mādhyamaka system (the Middle Way) of Buddhism, argue that attachment and clinging to static conditions, concepts, and ways of life are the fundamental causes of suffering. The First Noble Truth of the Buddha was that all life is suffering, trying to make permanent that which is transitory.

Arthur Kleinman[5] has pointed out how serious illnesses "embody" a dialectic between shared intersubjective cultural meaning and values that always provides a particular meaning of illness for suffering patients, their families and friends, and their professional caregivers, and that this meaning affects their lived experiences. That is, shared cultural values, goals, beliefs, and meaning interact with the lived experience of individuals and their perceptions of wellness or sickness.

Kleinman,[5] an anthropologist, and Thomas Greening,[6] a psychologist, both have argued that the most challenging aspect of a traumatic emotional disturbance involves the loss of a familiar world; a loss that cannot be "cured" or mended by drugs, catharsis, deconditioning, or social support. If these interventions do produce long-term changes, it is largely because they have imbued the patient's life with fresh meaning and new perspectives that enhance or vitalize meaning. Conceptualizing PTSD as a social construct enables therapists and patients alike to work with it as a fluid condition. As a result, there are no universal truths in an event, or in the treatment of PTSD. Trauma, like pain, is not an external phenomenon that can be completely objectified. Like pain, the traumatic experience is filtered through cognitive and emotional processes before it can be appraised as an extreme threat. Nevertheless, the term can be used descriptively to refer to people who are suffering, and prescriptively to identify therapeutic responses that help relieve that suffering.

Several psychological and psychobiological mechanisms are at work when a person achieves relief from PTSD. For example, PTSD, characterized

by high physiological arousal, resembles state-dependent learning in which brain states affect the retention of knowledge. Cognitive and emotional relief, therefore, occur when this arousal is dulled, or when traumatic experiences are reformulated, reframed, or integrated into one's ordinary behavioral and experiential repertoire. Greening speaks of moving "beyond trauma" to higher levels of personality integration and development.[6]

History of the Diagnosis and Treatment of PTSD

Exposure to potentially traumatic stressors is inseparable from the human condition. People were healing one another long before there were accepted definitions for *illness*, *sickness*, *disease*, *syndromes*, and *disorders*. Before the term *PTSD* was constructed by the mental health care community, many recognized, as documented in mythological, literary, and historical sources, the toxic emotional effects of early childhood traumas. For example, after Isaac was bound and nearly sacrificed by his father, Abraham, there is little mention of him in biblical accounts. Those that do appear include an arranged marriage at the age of 40, a dispute over the ownership of local wells, and a deception by his son, Jacob, who stole his brother's birthright. These incidents indicate that Isaac's behavior was passive and marked by social altercations, two hallmarks of what today is called PTSD.[7]

Additionally, psychopathologies of trauma have been described by individuals living in prescientific eras. For example, Samuel Pepys's description of the 1666 Great Fire of London indicates that he suffered from insomnia, nightmares, anxiety, and outbursts of anger—all symptoms of unresolved exposure to trauma. Shakespeare, well known today not only for his plays, but also for his profound psychological insights, illustrates the lasting effects of trauma in *Henry IV*, when Lady Percy describes her husband, Hotspur, as melancholy, socially withdrawn, and talking in his sleep following a bloody battle in which he lost a kinsman.

A few physicians on both sides of the Atlantic posited cause-and-effect relations between traumatic experiences and psychiatric disabilities in the 19th century. American physicians described cardiac and respiratory problems coupled with anxiety among several Civil War veterans, while French physicians noted that natural disasters and accidents were often followed by emotional numbing. During the First World War, similar conditions were referred to as *shell shock*, and during the Second World War as *battle fatigue*. This development coincided with a revival of interest in hypnosis, which became a frequently utilized treatment for symptoms now associated with PTSD. Some followers of Sigmund Freud used the term *war neurosis*, but denied an organic basis to the condition, hypothesizing that it was the consequence of adult trauma and recommending psychoanalytic treatment. Abraham Kardiner, a psychoanalyst, conducted a study

of psychiatrically disabled World War I combat veterans, terming the condition *physioneurosis*. S.L.A. Marshall,[8] a World War II military analyst, was the first to systematically collect data during and immediately following battle.

The first two editions of the *DSM* gave brief mention to *combat stress reactions*, but Robert J. Lifton and other psychiatrists, after working with Korean War and Vietnam War veterans, helped ensure the disorder a separate category in future *DSM* editions. The nature of traumatic stressors was described in some detail by the authors of the *International Classification of Disease* (Volume 10), who claimed that stressors could be mental or physical, and rarely included common life trials like illness, divorce, job dismissal, romantic rejection, financial reverses, and the like. Because of the slow recognition of PTSD as a singular disorder, Katz[7] has proposed that "it represents the least studied major psychiatric disorder and our ignorance is as significant as our understanding" (p. 555). To meet this need, various screening instruments have been developed in an attempt to facilitate treatment and expand the data base.[3]

Because PTSD is a social construct, it is important to note that it is generally diagnosed and treated by clinicians from Western industrialized nations who work with patients from the same background. However, the psychological impact of traumatic exposure may be a major difference between Western and non-Western societies. For example, Mādhyamaka Buddhists of Southeast Asia cite clinging to particular desires as a prime cause of suffering. According to several researchers, acceptance of one's suffering may promote resilience against psychic trauma. Katz's lament about the lack of clinical research is urgent when one considers the absence of comparative cross-cultural data and culturally appropriate models for treatment in developing countries.[2]

INCIDENCE AND TYPES OF PTSD AMONG COMBAT VETERANS

Both prospective and retrospective epidemiological studies indicate that most people in the United States will experience a major traumatic stressor during their lifetime.[8] In addition, about 10 percent of them will develop PTSD at some point. These statistics are also more nuanced than they appear. For example, PTSD is twice as common among U.S. women as among U.S. men; however, this difference may be due to women's tendency to seek professional help more often than men.

A study of PTSD among U.S. Vietnam veterans found similar patterns for female veterans (mostly nurses) as for males relative to their level of exposure to war-zone stressors (like dead or wounded soldiers). Yet, for women exposed to high war-zone stress, up to 20 percent were diagnosed with PTSD. Overall,

53 percent of male Vietnam veterans and 48 percent of female veterans have experienced clinically significant stress reaction symptoms, not all of them warranting a PTSD diagnosis. In addition, several scholars have compared PTSD in combat veterans with similar symptoms in female victims of rape or incest. In both cases there is a conflict between the will to deny horrible events and the will to proclaim them aloud. This internal conflict has often been described as the result of a "shattered self" where basic trust has been obliterated. Therefore, PTSD not only is a traumatic stress disorder, but also is one that results from a combatant's isolation from home and community, combined with the uncertainty of the near future.

PTSD can be conceptualized as a three-stage process. First, there is the presence of highly diverse predisposing biological, psychoneurological, socioemotional, and spiritual-existential factors. When a person is subjected to a traumatic stressor, his or her initial reaction activates the sympathetic component of the autonomic nervous system. This becomes evident through both physical symptoms (e.g., tachycardia, hyperventilation, increased muscle tension, sweating, hyperactivity) and subjective reactions (e.g., anxiety, hypervigilance). Not surprisingly, prolonged stress weakens immune system function. A cohort study of 1,400 U.S. Vietnam veterans followed over two decades demonstrated that those with PTSD (nearly a quarter of the total) were twice as likely to have chronic conditions such as cardiovascular disease. Additionally, those with PTSD have a smaller hippocampus, which is associated with memory and learning.[9]

Regarding socioemotional factors, one's developmental stage in life and one's place in the community can play predisposing roles in PTSD. One's level of maturational development, defensive coping style, worldview, and social standing are part of a complex socioemotional system that can buffer individuals against the effects of trauma or increase their vulnerability. Apparently, the more flexible a person's self-concept, the more resilient that person can be.

At the heart of PTSD's social sequelae is isolation, or a feeling of disconnection from family and friends. In situations of terror, people spontaneously seek their first experienced source of comfort and protection; wounded soldiers and raped women often cry for their mother or for God. When their cry is not answered, basic trust in the world is destroyed. Traumatized individuals feel utterly abandoned and alone, cast out of the divine system that sustains life. From that moment on, a sense of alienation and disconnection pervades each relationship. In addition, predisposing social attitudes can encourage one's family and friends to exhibit compassion or to withdraw support. The media's presentation of events can enhance support or undermine resilience.

Much of the anguish suffered by returning Vietnam veterans was the result of their rejection by society. Many felt shunned, as did Daryl Paulson, who faced combat in the Vietnam War.[10]

> When our 707 landed at El Toro Marine Air Station, I was secretly preparing for a hero's welcome. I think all of us reasoned that we would get a double strong welcome, because we had fought, in spite of the absence of any explicit government plan to win the war. . . . We landed and walked out of the plane to our homecoming reception. I saw three people waiting for us. That was it! They were Marine wives who had volunteered to serve cookies and Kool-Aid to us. Where was everyone else? . . .
>
> Once in the air terminal, we were escorted to waiting military buses and driven to Camp Pendleton Marine Base for discharge or reassignment. During the drive, some college-age people screamed obscenities at us and flipped us the bird. I can still remember them yelling something about being "war mongers." At Camp Pendleton, we were swiftly processed and bussed to Los Angeles International Airport to schedule flights home. At the airport, I went to a bar to have a couple of drinks while waiting for my flight. This was an especially big event for me. It was my first legal drink in the United States, for I was of age—21. I felt like being friendly, so I tried to start a conversation with two women sitting next to me, but they ignored me. Then I tried to talk to a couple of guys, but they, too, ignored me. It began to dawn on me that no one cared that I had served in the Vietnam War. I felt like a misfit.

In parts of the former Yugoslavia, victims of the tragic mass rapes were seen as "poisoned containers," even by family members. However, victims of those wars were also dehumanized by some of the United Nations peacekeepers sent to protect them. One Finnish solider admittedly created a psychological distance to preserve his own equilibrium. He simply asked a refugee for a name, then stamped a document, admitting in retrospect that "a life was nothing" (p. 560).[11]

One's external membership in organized religion and/or one's internal spiritual-existential belief system can also be powerful predisposing factors in how a traumatic event is handled. Paulson[10] illustrates the problem of existential guilt:

> Plagued with guilt, I tried to find a place where I could go for forgiveness, to get away from this hell [guilt, anxiety, and despair]. I felt too guilty to go to God and church, for I had killed, I had injured, and I had tortured my fellow human beings with intense delight. No, I could not go to God or church, for I had too much blood on my hands. I reasoned that no one wanted me now, not even God, for I had killed His children.

Social and personal myths are narratives that address life meanings and, therefore, an individual's day-by-day decisions. A child who has been sexually

abused by a priest might be devastated (if his/her personal myth holds that "Priests are God's representatives on earth"), or might assimilate the experience (if his/her personal myth summons the response, "My mother told me not to trust older men, not even priests"). Evolutionary psychology takes the position that human behavior is not completely reducible to biological factors or genetic determination. Humans have evolved to interact with the environment over thousands of generations. Anxiety is valuable to the species, as individuals can determine quickly whether to flee or fight when threatened. While the adaptation is valuable, there is a substantial lag period between when the tools are needed and when they actually evolve. In some ways, humans meet postmodern challenges with primordial reactions. According to Lifton,[13] the intrusion of death imagery (i.e., being killed) during a traumatic incident is what threatens the core belief in one's safety. As a result, PTSD often arises from a general violation of deeply held beliefs and expectations about the world and one's place in it.

At the beginning of 2005 some two dozen countries were engaged in, or were recovering from, a civil conflict. Researchers studied four of these countries, Afghanistan, Democratic Republic of the Congo, Somalia, and Sudan, finding that factors such as malnutrition, lack of sanitation, nadequate water supplies, and poor public health services predisposed civilians to PSTD, as well as to illness or death.

Given that each person faces a traumatic stressor with a different set of predispositions, a traumatic event and its context serve as the activating factor. Whether the stressor (or, in some cases, the series of stressors) will trigger PTSD depends on its severity and its interaction with one's predisposing factors. About one out of four individuals exposed to traumatic stressors threatening their life or physical integrity (e.g., war combat, rape) develops PTSD, a much higher figure than the overall 10 percent estimated for all types of potential trauma. In 2005, the U.S. National Center for PTSD reported that up to 30 percent of combat veterans suffer from the condition at some point in their lives, a phenomenon that has been described as the psychological consequence of killing. Earlier, a 1990 study of 1,582 Vietnam War veterans found precombat personality factors were less important in eliciting PTSD than war-zone stress itself.

Finally, incidents later in one's life that provoke traumatic memories often serve to reinforce, or even aggravate PTSD. Again individuals differ. Generally, a war veteran working in a fireworks factory will be at greater risk for memory recall than one filling orders for organic food supplies. Yet, some individuals feel that stress is imminent even in times when stress is low. This has been described by one study as "waiting for the other shoe to fall." Individuals become aroused

and anxiety-ridden, looking for a threat or danger to activate their free-floating nxiety. For example, Paulson[10] writes:

> I tried to go on relaxing picnics with my friends, but I became too uneasy, even with tranquilizers, to enjoy the picnic. I kept feeling that someone—the enemy—was hidden in the trees, stalking me, just as I had felt in Vietnam. At times, I became so tense and anxious on these picnics that I would have to drink a couple belts of whiskey just to get through the ordeal. No fear impacted me as the fear I felt during thunder storms. Even though I knew thunder was caused by lightening, the sound of thunder would send me right back to Vietnam. I would drop to the ground to protect myself. . . . Other veterans I have talked to reported similar experiences. They reported panic attacks when a fire alarm was set off, when a helicopter flew over them, and when hearing loud noises.

Military PTSD victims are rarely sent back into combat, even in a different war, despite a professed desire to take up arms again. The similarity of a new battleground with the original traumatic stressor typically makes these soldiers a potential threat to themselves and to others.

PTSD among Vietnam, Gulf, Afghanistan, and Iraq War Veterans

Greening[6] has provided a case history highlighting three important aspects of PTSD: (1) character structure, (2) family background, and (3) social background. Greening observed that his patient's character structure (one with a strong manipulative streak), family background (replete with alcoholic and depressed relatives), and societal background (a business career involving unethical practices) provided a predisposition to PTSD that was activated while fighting in Vietnam. Although the patient performed well in combat, he experienced an atrocity that disturbed him to his core. As time went on, he became involved with illegal drugs and became cynical about the way the U.S. government was conducting the war. He returned home with an unmanifested PTSD that quickly emerged with an array of symptoms, including flashbacks. He was hounded by a particularly disturbing flashback in which he remembered a soldier's corpse that looked like him, and he had a hard time differentiating between himself and others. He filled his social life with "fast" women, one of whom he impregnated, and whose unannounced abortion made him feel guilty. His acute PTSD symptomatically manifested with generalized depression and distrust of others, leading him into a period of psychotherapy. During this time, he was able to greatly reduce PTSD symptomatology and found a worthwhile job as a hospital fund-raiser.

Others were not so fortunate. In a study conducted by Paulson,[10] the plight of two Vietnam veterans was described. "Joey" went back to college and his fraternity when he returned from Vietnam. He found, however, that he was no longer wanted. His fraternity brothers no longer wished to associate with him. He was "flawed." He was a Vietnam veteran. He could not deal with that, so he shot himself in the head.

The second combatant used a different mechanism to escape his pain:

> Art, a Marine Corps veteran, came back to the states and went to college. He suppressed his entire Vietnam experience and never spoke a word about it to his non-military friends. By this action, he found that he was harboring tremendous amounts of guilt. To compensate for this, he tried to be all things to all people. He tried his best to be the most caring friend to the women he knew, he tried to be the best, most caring friend to the men he knew. In the process, however, he denied his own needs. On the outside, he put on a good show, but his inner conflict was betrayed by his ever present need for a drink, an R&R on the rocks. Art ultimately withdrew from college, moved to Mexico, lapsing into alcoholism.

The media has publicized the number of U.S. combatants killed in the Afghanistan and Iraq wars but less attention has been given to those who have been so seriously injured that they had to be evacuated. Based on interviews with Department of Defense officials, National Public Radio in October 2004 estimated the number to be 20,245. An additional 800 people were evacuated for treatment of PTSD and depression, and 600 for skin diseases resulting from insects and parasites.

Combat is a huge potential traumatic stressor because it exposes combatants to situations that involve killing others, as well as being killed. It is not theoretical, nor can it be deferred into the future. It is a long, persistent, seemingly endless now.[9] One must remember that military action itself does not occur in a vacuum; Vietnam veterans' flashbacks might represent unsuccessful attempts to make sense of an experience that many of the veterans' fellow Americans considered to be pointless or wrong.

Paulson[10] has described his dilemma of trying to have a relationship with women. Before going to Vietnam, he fantasized about finding a warm and caring woman to marry. However:

> When I did return, things were different. I found I did not really like to be with women; they made me nervous. To be held by a woman made me feel very vulnerable. Instead of feeling good, I would feel terribly sad and afraid in her arms. It was almost like being a little boy again, in need of a mother to hug away my pain.

He continues, describing why he felt vulnerable:

> We had to distance ourselves from any meaningful encounters with women, because we felt that we could not share with them what we had experienced. How could you tell your girlfriend what it was like for you to shoot another human being? How could you tell her how vulnerable and scared you had felt, never knowing if you would live another hour the whole time you were in Vietnam? How could you tell her what it was like to kick dead [enemy] soldiers because you were so angry at them for killing your friends? I was afraid to tell any woman what it was like. How could I tell her about the horror I felt watching a dump truck taking the corpses of seventeen of my friends to be embalmed? How could I tell her what I felt when I watched their blood drip and flow from the tailgate onto the ground? How could I tell her how deeply I hurt, of the agony I was in, and how gnawing my suffering was? How could I tell her that the pain and guilt followed me like a beast tracking its prey? How could I tell her that the pain hounded me day and night, even while making love? What would she think of me if I told her? I feared that if any woman knew this about me, she would freak out, go into convulsions, vomit, and totally reject me for being such a disgusting human being. What was I to do? I did what seemed best: I drank and drank and drank.

Besides flashbacks, common symptoms of PTSD among veterans include hypervigilance, dejection, panic attacks, substance abuse, inappropriate acting out, unaccountable episodes of rage, depression, and cycles of anxiety and guilt (guilt often fuels anxiety, and this anxiety later fuels additional guilt). Moralizing noncombatants sometimes reinforce these symptoms by attacking soldiers for their role in the conflict. Some veterans may feel they have lost everything of value and are thrown into utter alienation from friends, lovers, family, and themselves.

The *DSM–IV–TR*[1] lists some 17 symptoms or symptom clusters and stipulates that at least 6 must be present (and long lasting) for the diagnosis of PTSD to be made. The *DSM–IV–TR* groups the symptoms into reexperiencing the stressor (e.g., intrusive thoughts and images, nightmares, flashbacks);[2] avoidance and emotional numbing (avoiding stimuli associated with the trauma, inability to experience a full range of emotions);[3] hyperarousal (e.g., exaggerated startle response; vigilant sleep disruption). Anxiety is often generalized to areas that were not associated with the actual trauma. The stressor finds many ways to intrude into the patient's stream of consciousness; whether the stressor is reexperienced or avoided, it brings about some type of arousal. Paulson[10] describes this situation:

> I felt completely alone and totally isolated. I lived in an alien world with which I could not communicate. I did not fit in with the other college students, since I was a Vietnam veteran, but I did not fit in with the military, either. I spent a little

of my time studying, but most of my time, I spent drinking to assuage the pain of life's all-too-obvious meaninglessness. The recurring visions and dreams of the killing I had seen and the killing I had done began to intensify. I just could not stop visualizing—and reliving—the emotional scenes of my comrades' deaths. Even the alcohol was not taking the edge off. I could not sleep, and I could not bear the pain of being awake. I could only suffer and hurt and despair over the meaninglessness and aloneness I endured, but even these were not as painful as the guilt.

In each of these ways, the stressor comes to dominate the veteran's awareness, particularly his/her worldview, usually unexpectedly and often in ways that are maladaptive and dysfunctional. Veterans often try to avoid reexperiencing the stressor in a number of ways. They attempt to forget anniversaries of the traumatic event, attempt to stay away from activities or feelings that arouse recollections of the event, and engage in "emotional numbing," not sharing feelings about the event with anyone. This numbing is often carried to extremes, leading to the avoidance of marriage, children, long-term employment, and close friendships. It may lead to emotional detachment from others, if the involvement becomes anxiety-producing. Veterans may even forget key elements of the traumatic event, engaging in defensive repression, suppression, or denial.[9]

The veteran may experience persistent anxiety due to increased arousal that was not present before the traumatic experience. For example, sleep disorders (especially difficulty falling asleep and staying asleep) are common, as are outbursts of anger, irritability, paranoid-like hypervigilance, and exaggerated startle responses. Friends learn not to take the veteran by surprise, even for benign purposes, for fear of being verbally admonished or physically attacked. If a scene from a movie, theatrical event, or television show is reminiscent of the traumatic stressor, it is not uncommon for the veteran to leave the room to avoid "losing it" or acting inappropriately.

From an evolutionary psychological perspective, this behavior is founded in what anthropologists call "survival benefit." In a combat situation, it is normal to be hypervigilant, to drop to the ground upon hearing explosions, and to have sleep problems. What makes the behaviors maladaptive is the change from a war zone to a non-war zone. And because the combatants cannot instantly drop their combat theatre behavior, many, upon their return from combat, cognitively judge their behaviors negatively, reinforcing inner conflict between "what is" and "what should be."[9]

TREATMENT PROCEDURES FOR VETERANS WITH PTSD

Most treatment procedures for PTSD are aimed at reducing symptomatology to help the client to acknowledge that his/her reaction to the initial threat is normal, and to help take ownership of his/her existential situation.

Following these steps, adequate coping methods (e.g., self-regulation, self-management) need to be introduced to permit awareness of the traumatic experience, but without allowing the memory to interfere with daily activities. PTSD is not easy to treat therapeutically, but is often more treatable than anxiety disorders encountered in normal maturation because combat trauma is experientially removed from day-to-day civilian life.

Anxiety resulting from intrapsychic conflict (e.g., feelings of inferiority or inadequacy) dominates a veteran's life. He or she may feel like a victim, expressing anger and pain that continue to backslide without resolution. Various defense mechanisms assist veterans with otherwise unbearable trauma, but also present barriers to psychological therapy.

For example, when Paulson[10] first started to reveal his experiences in Vietnam to his therapist, he thought that the therapist would also abandon him. He recalled, "I could visualize him clutching his throat and gasping in horror as he fell from his chair over the disgusting, disgraceful things I had done in Vietnam. When I did tell him, fearing he would kick me out of his office, he merely said, 'Thank God that is out in the open now.' He did not reject me."

Many therapists stress the importance of having a support system. A support system offers the veteran positive reinforcement in the confrontation with his/her anguish, and a buttress for a more functional and healthier self-concept. This gives the veteran a firm platform on which to build a more auspicious understanding of the traumatic events without fear of rejection. For example, Juan, an Army infantry officer, described his experience to us:

> When I came back from war, everything was different. I did not know who I was, what I was, or where I should be going in my life. I was off balance. But since I was perceived as tough combat veteran, I felt that if I told anyone how off balance I felt, I would somehow be thought a very weak person. So, at first, I played the role of a tough infantry officer. But I became more and more cynical, unhappy, and more confused. I wanted to drop the whole stage performance and tell everyone, including myself, how scared and miserable I was. But where could I go? There was no psychological support system that I knew of at the time. So I found another answer, that of drinking. I began to live my life with a little on-going "buzz." It blunted the sharp sting of life's cruel horror. But soon, I found myself drinking more and more, and within two years, I was a drunk. I was hospitalized in an alcohol treatment program and, during that time, something marvelous occurred. Several representatives from Alcoholics Anonymous (AA) visited me. I decided to join AA and, to my surprise, I found a very supportive group of people who had "been there." They had hit the bottom in their lives and now were working their way back. They gave me the strength to deal with Vietnam just by being accepting. I could question my motives, my life, anything, and they did not judge me. After I had

this support base, I used it to launch my life. I quit drinking. I learned a lot about the benefits of a support group from that experience.

Often, people who have not endured significant emotional trauma wonder why it is so difficult to mollify suffering. This underscores the divergent reality that the pain generates for victims of PTSD. They cannot relate to notions of self-fulfillment or self-actualization, or to people who can, because their world is one of constant danger, and most of their day is consumed with maneuvers to guard themselves from those dangers and potential destruction.[9] Because this constructed reality is one in which the world is a perilous place, they must constantly be vigilant and removed. Hence, part of the reason for their severed bond with collective reality is a fundamental distrust of the world and its inhabitants. After all, the origin of their distress is easily traced to the mercurial world outside of themselves.

A comprehensive clinical assessment of PTSD needs to include carefully structured interviews, administration of self-report psychometrics, and a thorough evaluation of past traumatic experiences. A "cookbook" approach is contraindicated because each case of PTSD is quite different. Several instruments have been designed specifically for the identification of PTSD (e.g., the PTSD Checklist, the PTSD Diagnostic Scale) while others are based on existing inventories (e.g., the Minnesota Multiphasic Personality Inventory).

Several therapists have suggested an integrative approach to treating PTSD.[15] In this approach, the therapeutic procedure is relative to the needs of the patients and to their unique existential situation. Second, insight therapies (e.g., psycho-dynamic and humanistic-existential therapies) are important for understanding and integrating traumatic experiences into daily life. However, applied therapies (e.g., cognitive behavior and behavioral therapies) are important for confronting anxiety brought on by exposure to unavoidable events (e.g., thunderstorms, loud noises).[14]

At present, no one therapeutic approach for PTSD has demonstrated its superiority to the others, though mainstream psychologists favor cognitive-behavioral therapy. Significant results have been found for all psychological therapies on which data exist, especially behavioral therapies.[15] In the field of medicine, the development of psychotropic medications has led to other innovations, either as the primary mode of treatment or as an adjunct to psychological therapy.

Treatment methodologies can be classified as either[1] exposure-based approaches (e.g., systematic desensitization, implosion, flooding, prolonged exposure, imaginal therapy),[2] cognitive restructuring therapies (e.g., cognitive-behavioral therapy, modeling, rational-emotive behavior therapy),[3] or anxiety management

(e.g., relaxation training, biofeedback training, meditation, pharmacology). These categories, of course, are arbitrary; some writers combine implosion and flooding, some place biofeedback under behavioral approaches, and others make pharmacological treatment a separate category.

In addition, Greening[6] would add humanistic-existential psychotherapy to this categorization. This approach often helps clients deconstruct their story of trauma, and reconstruct a story of survival. However, clients are encouraged not to remain content with their status as survivors but to marshal such psychological and spiritual resources as optimism, resilience, and hardiness. Clients may be asked to create narratives to deal with trauma, loss, and death, using not only verbal dialogue but expressive art and dance therapy as well.

The Therapeutic Spiral Model is based on the assumption that traumatic memories are stored in the combat veteran's brain. This short-term approach uses adaptations of psychodrama and role-playing to focus on those brain centers involved in nightmares, flashbacks, and other emotional sequelae, areas that purportedly are bypassed by talk therapy. Others advocate a variety of approaches that are body based in an attempt to break the veteran's behavioral pattern of defense and avoidance.

Whichever approach is used, the severity of PTSD may be reduced by the judicious and timely use of trauma counseling.[7] For example, critical incident stress debriefing (CISD) was attempted with adult survivors of the September 11, 2001, attacks in New York City, but follow-up studies failed to demonstrate its effectiveness. As an alternative to CISD, some therapists have recommended brief cognitive-behavioral therapy two to four weeks after the trauma, when they claim it is most efficacious for treating high-risk PTSD populations.[16]

Positive outcomes of cognitive-behavioral therapy are reported in literature on the subject, and one of the best known is Albert Ellis's rational-emotive behavior therapy (REBT). Veterans are taught how to alter their own irrational belief systems; because these systems drive behavior, it is assumed that their transformation will lead to changes in veterans' daily lives. REBT, although highly cognitive, emphasizes feelings—both those that add to one's life and those that sabotage it. REBT is often used in combination with other therapies.

Hypnotically facilitated psychotherapy is frequently used to alleviate the suffering associated with PTSD. One study found that when combined with cognitive-behavioral therapy, there was a greater reduction of symptoms (at six-month follow-up) than when the latter was used alone.[17] One of several procedures is to ask the client to "relive" the experience several times while hypnotized; suggestions are given to desensitize the client until the images of the trauma no longer evoke distress.[12] Ernest Rossi has proposed that both hypnosis and traumatic dissociation are rhythmical, occurring at predictable

intervals, usually between 90 and 120 minutes, during the day. Peter Brown[17] has noted that a therapist's knowledge of these rhythmic patterns can enhance the deconditioning process, especially if she or he has attempted to trace the physiological pathways responsible for these patterns and has described how they can be mobilized for therapeutic "tuning."

Behavioral therapies cover a wide range of approaches ranging from systematic desensitization and implosion or flooding, to relaxation training. The improvement attributed to behavioral therapies has been more noticeable in lessening symptoms related to depression, anxiety, fear, and intrusive thoughts and images, but less effective in treating emotional numbing and avoidance behavior. Some studies have found implosion to be especially effective in the treatment of anxiety, but it also has a high rate of complication, including escalated depression and panic episodes as well as the relapse of alcohol abuse. Systematic desensitization and similar approaches appear to facilitate a decrease in such target symptoms as intrusive phenomena, avoidance, and flashbacks, but psychodynamic and cognitive therapies seem to be better suited to address such issues as low self-esteem and hopelessness.

Many practitioners of so-called energy psychology claim to have treated PTSD successfully. Using an approach based on Chinese medicine's meridian theory, the energy psychologist typically combines mental imagery and/or verbal affirmations with the stimulation of acupuncture points to effect attitudinal and behavioral changes. David Feinstein and his associates[18] relate the story of "Rich," a hospitalized Vietnam War veteran disabled by insomnia, haunting war memories, and height phobia (due to several parachute jumps made during combat operations). During treatment, he was asked to imagine a situation involving heights; his fear level increased immediately. While holding the image of these stressful events, Rich was asked to stimulate a number of points on his skin by tapping them with his fingertips. Within 15 minutes, Rich reported no fear reaction; the therapist tested this report by having Rich walk onto the fire escape on the third floor with no resulting anxiety.

The therapist then asked Rich to retrieve several of his most intensive combat memories, using the same tapping procedures. These memories were "neutralized" within an hour; Rich still recalled the experiences but they had lost their emotional charge. The therapist taught Rich several apping procedures as homework assignments. Within a short period of time, his insomnia ceased, war memories left his immediate consciousness, he discontinued his medication, and he checked himself out of the hospital. A two-month follow-up indicated that Rich was symptom-free. Several war veterans in the same hospital were treated with similar methods, reportedly achieving similar results. It is clear that the claims of energy psychology need to be investigated

by outside observers. If this modality proves to be an empirically validated approach, it could rehabilitate many combat victims in a cost-effective manner through short-term treatment.

Traumatic incident reduction (TIR) is another novel short-term treatment procedure for PTSD and related disorders.[19] TIR operates on the principle that a permanent resolution of a case requires the recovery of repressed memories rather than mere catharsis or coping. It purports to take a "person-centered" perspective, finding out what made the triggering (or "root") incident traumatic from the client's viewpoint. The client is encouraged to express and experience the traumatic incident fully, enabling the incident to be "discharged," at which point it becomes a past, rather than an ongoing, incident. The client tells and retells the TIR practitioner everything he or she remembers about the root incident, each time "peeling off" layers of thoughts, considerations, emotions, decision, and opinions. The incident, or incidents, undergoes reframing and cognitive restructuring, often accompanied by imaginal flooding, sometimes facilitated by hypnosis, gestalt work, and systematic desensitization.

TIR therapists claim to arrive at lasting results in as little as two or three hours; in one research study yielding favorable results, the average length of time per session was 71 minutes.[19] In this study, TIR was compared with two varieties of energy psychology treatments (i.e., thought field therapy, eye movement desensitization and reprocessing), both of which require very little verbalization and claim to "interrupt" the post-traumatic reaction on a physiological level. The contention of TIR practitioners, in contrast, is not that it interrupts the reaction, but "extinguishes" it. One of the treatment modalities, thought field therapy, was credited by the chief medical officer of Kosovo for rehabilitating 105 victims of violence.[19]

Practitioners of eye movement desensitization and reprocessing (EMDR) ask the client to focus on several aspects of a distressing experience. At the same time, the client's attention is grounded on some form of bilateral stimulation such as eye movements, tapping, or sound stimulation. This combination of dual focus and bilateral stimulation is said to generate a reduction in the emotional charge associated with the distressing experience, desensitizing the client. As this desensitization occurs, the client is guided through a process of cognitive restructuring in which the personal meanings associated with the disturbing experience are transformed (e.g., "I am in danger" becomes "I am safe now").

Proponents of EMDR point to research data supporting the long-term effectiveness of this technique (see www.EMDR.com), claiming that talk therapies attempt to train the left frontal cortex (the verbal/conscious part of the brain) to override an already aroused right limbic system (i.e., the emotional/arousal part of the brain), the area directly accessed by EMDR.

Elizabeth Earle-Warfel, in her 2005 doctoral dissertation written for Saybrook Graduate School, proposed a model of PTSD based on chaos theory. For her, EMDR and energy psychology may be effective because, according to chaos theory, only slight perturbations of a few crucial neurons may be needed to alter the stability of whole neuronal systems.

Group therapy is commonly used as an adjunct to other treatments, especially in the Veterans Benefits Administration system. Its benefits include providing a structure of social support and stability for PTSD clients, as well as enhancing socialization and decreasing the intensity of avoidance behavior. Readjustment for Vietnam veterans appears to be enhanced if the other veterans led discussion groups, family counseling, and workshops in coping skills.

The use of various psychotropic medications has become prevalent PTSD, especially since they often entail pronounced positive effects. With the advent of specific serotonin reuptake inhibitors (e.g., Prozac, Paxil, Effexor), few negative side effects are noted, with the benefit of noticeable reduction in anxiety and depression.[20] There is considerable benefit in employing these pharmaceuticals, but their use generally requires contiguous psychotherapy and/or counseling to accomplish more than symptom reduction. Pharmacology can be used in combination with psychotherapy or by itself. In some studies, however, psychological therapies have been more effective than psychotropic medication, although both treatments led to greater symptom reduction than comparison groups of clients who received no treatment.[21]

Acute anxiety is typically treated by the minor tranquilizers. Tricyclic drugs, including amitriptyline, have been employed with some success,[7] especially to treat avoidance syndromes. Other tricyclic antidepressants have been used with greater success to treat intrusive symptoms. Fluoxetine appears to reduce reexperiencing, while sertaline and parexetine are among the most commonly prescribed medications for other PTSD symptoms.

Relapse following medication has been attributed to its failure to address veterans' existential issues and to move them beyond trauma.[6] For example, Iraq war veterans have described the problems and uncertainty accompanying their participation in that conflict; initially they viewed the war as protecting their homeland and liberating Iraq from a despot. Later, combat zones were no longer demarcated, and threats appeared from suicide bombers, snipers, rocket-propelled grenade launchers, and roadside detonation devices. It should come as no surprise that an estimated one out of every six U.S. military men and women returning from Iraq appears to be in need psychotherapeutic care.[22]

Once the most effective approaches have been identified through evidence-based practices,[23] it would be commendable if selected procedures could be

taught to health care workers who lack extensive training in psychotherapy, yet possess the personal skills and sensitivity needed to treat raumatized veterans. These men and women are survivors of a protean type of warfare. Terrorists, especially in Iraq and Afghanistan, often take combatants by surprise, use civilians as human shields, and justify their techniques to capitalize on errors in judgment and practice committed by Americans and their allies.

The nature of such warfare takes a toll on caretakers and practitioners as well as combatants. *Compassion fatigue* is a condition that affects many practitioners who work with people suffering from trauma. It can be described as a preoccupation with the trauma of their clients and subsequent weariness in their attachment. Compassion fatigue is associated with sleep disturbances, irritability, tension, and anxiety; if not detected and treated, it can lead to practitioner burnout. As one counselor remarked, "I lost my ability to feel. I . . . could not feel sad, angry, scared, or happy" (p. 24).[24]

Interaction of PTSD and Other Combat-Related Disorders

When a therapist contemplates which treatment strategy to use for PTSD, he or she needs to consider possible associated conditions, since they will have a direct impact on the client's response to treatment. A concomitant episode of major depression is an especially important related disorder to keep in mind, given the high rate of suicide attempts, successful and unsuccessful, among combat veterans. Other taxing conditions include anxiety disorders, phobic disorders, depression, substance abuse, and organic mental disorders.[25]

Chronic exposure to trauma has been known to lead to dissociative identity disorder (DID). Given the socially constructed nature of self-identity, it should be no surprise that a condition such as PTSD, which often devastates a veteran's prewar identity, could lead to the emergence of alternative identities. Maldonado and Spiegel[26] have remarked that it is rare to see a DID patient who has not been exposed to intense trauma, usually in the form of repeated physical or sexual abuse.

There is one other diagnostic issue that must be carefully considered. Therapists must consider that after a PTSD diagnosis a patient may receive immense secondary gain in the form of financial reimbursement and legal benefits, not to mention increased attention from powerful people in the mental health hierarchy. When a differential diagnosis is made, the possibility of factitious disorder or malingering is present and must be considered, because the presence of either can have a major impact on the patient's treatment.[26] Misdiagnosis may occur for any of the *DSM* categories but the accurate diagnosis of PTSD is especially crucial.

Treatment Procedures for Family Members of PTSD Veterans

Families of combat veterans with PTSD face challenges as well.[27] The mother of a guilt-ridden Vietnam veteran with PTSD told the investigative reporter Seymour Hersh, "I gave them a good boy and they sent me back a murderer." Many of these veterans cannot sustain their marriages; others commit acts of violence against family members, including murder. In these cases, incarceration becomes a "treatment" to limit the harm that can be done to others.

A PTSD diagnosis is not needed for family problems to exist. Williams and Williams[28] reported that one out of three combat veterans experienced readjustment difficulties without evidence of concurrent psychological trauma. Nonetheless, may therapists object to labeling returning combat veterans "psychiatric time bombs," claiming that Vietnam veterans were no worse off for their experiences than survivors of previous wars and were about as likely to lead successful lives as nonveterans.

Historically, psychology has focused primarily on addressing individual psychological consequences of war and designing appropriate interventions in turn. The psychological literature on the impact of war stress on families is scarce, and there is a lack of theoretical models, assessment tools, and psychologically based modes of intervention on a large scale to aid civilian victims of war, and families of PTSD victims. Consequently, psychologists and other aid workers who attempt to address the needs of these populations locally, either directly or in a consultancy role, are faced with a lack of resources. This need has generated efforts from various areas of psychology, in collaboration with other disciplines, to provide research and experimentation with different models of intervention with civilian victims of war.[29]

Current information regarding assistance for veterans with PTSD is posted on several Web sites: www.deepthought.org, www.menstuff.org, www.crisisinfo.org, and www.ncptsd.org, the latter under the supervision of the U.S. Department of Veterans Affairs.

PTSD as a Consequence of Modern Warfare

Terror and trauma seem to be dialectally related, yet little clinical research has appeared for either of them. Based on 72 interviews with survivors of five decades of terrorist attacks, genocides, concentration camps, and military bombings of civilian centers, Charles Webel[30] has referred to political terror as the external terrorizer and trauma as the internal terrifier. Both present threats to self-identity at its very core, and nonviolent ways are available to confront these twin horrors.

PTSD is one of several war traumas. All of them reflect the effects of war as an extreme stressor that threatens human existence.

In early 1990, the celebrated author Barbara Ehrenreich[31] gave a resentation on war and warrior elites to a group of sociologists. They were supportive and interested but reminded her that war had run its course. The cold war had ended, and they informed Ehrenreich that war was only subject for historical interest. Later that same year, the United States was at war in Kuwait and Iraq, and a little more than a decade later, in Afghanistan and Iraq. The conviction that war is obsolete has a venerable history of its own; the introduction of the gun and, later, artillery seemed to promise levels of destruction so immense that no state would want to risk them. After the bloodletting of the Napoleonic Wars, Auguste Comte and John Stuart Mill predicted that war would phase out as nations turned to industrial production. World War I was "the war to end all wars"; World War II introduced atomic weapons and a similar sobriquet. Since then, there have been nearly 200 wars of various shapes and sizes, taking more than 200 million combatant and civilian lives.[31]

At the same time, however, organized human resistance to war has been on the rise. While the practice and passions of war have been the province of a warrior elite, popular opposition to war largely has taken the form of opposition to the elite. Ehrenreich[31] comments, "It is a giant step from hating the warriors to hating the war, and an even greater step to deciding that the 'enemy' is the abstract institution of war" (p. 240).

In 2005, the Public Broadcasting Service aired a film titled *A Soldier's Heart.* One segment of it included an interview with a Marine sergeant who opened fire on an Iraqi civilian just as she was reaching into her handbag for a white flag as she approached the sergeant's checkpoint. When he realized his mistake, he broke into tears, crying over her dead body. Thereafter, he was unable to carry out his duties. Such are the consequences of modern warfare. And such is the nature of the enemy against which the defenders of peace will mobilize if war trauma, at last, is to take its place with the plagues of the past rather than remain a malady of the present.

ACKNOWLEDGMENTS

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Family Violence and Its Degrees of Deviance: Understanding the Truth or Paying the Consequences

Christina M. Dalpiaz

REDEFINING "DOMESTIC VIOLENCE" AS "FAMILY VIOLENCE"

The purpose of this chapter is to redefine violence between intimate partners as "family violence" rather than "domestic violence" and demonstrate how this type of violence affects society as a whole. This new definition thus expands the implications of family violence to all its victims. Unwittingly, society has tended to lessen the atrocity of battered victims and their children by minimizing their experiences as tiffs between two partners, excluding the impact on children, extended family, and society. These violent episodes are much broader, far-reaching, and complex than previously imagined. In 2000, 1,247 women and 440 men were killed by their intimate partners.[1] In many of these cases, the couples had children who were left without one or both parents.

The best available data regarding violence against women suggests that about 1.3 to 5 million women are abused annually. On the lower end of the scale, according to one study, 76 percent of these women were abused by current or former husbands, cohabitating partners, or dates. Interestingly, 835,000 men also reported being abused by their intimate partners.[2] These numbers suggest that society should take a closer look at the dynamics of family violence and understand that the entire family unit is being impacted and that no one, regardless of gender or position in the family, should be overlooked. The troubling aspect of all

of this is that the children who are exposed to violence against a parent, grand-parent, other relative, significant adult, or themselves are also being harmed. This exposure is robbing them of their childhood innocence and producing a new generation of violence, one that appears to be increasingly more violent than the last. In another study, between 50 and 75 percent of children living in homes where there is domestic violence were themselves abused.[3] As a result, one troubling statistic estimated that 63 percent of boys 11–20 years old who commit homicide kill a man who is abusing their mother.[4] And according to the Columbus Coalition against Family Violence, 80 percent of incarcerated juvenile offenders and adult prisoners reported coming from violent homes.[5] Consequently, society is building more facilities to house these children and young adults. These numbers are staggering. Imagine the monetary savings in the judicial system alone, if our country's response to family violence was more immediate, effective, and proactive. The system has become reactive and cannot financially manage these numbers adequately. Then the overpopulated prisons are forced to reduce sentences and the abusers are set free and often reoffend.

Throughout history, family violence has often been ignored. A desensitized society has resigned itself to the notion that two people in conflict are simply mismanaging their emotions and outsiders should mind their own business. The reality, however, is much graver and more insidious. Most victims and their children are essentially imprisoned and held hostage under inhumane conditions. Victimized families are forced to endure high levels of stress through emotional terrorism. The tactics batterers use to achieve fear are quite remarkable. For example, they may destroy precious items, threaten other family members with bodily harm, or kill family pets to gain compliance. The resulting fear generates conditioned responses that often permanently impact behavior and cognitive processing, enabling batterers to "groom" their victims into submission, making the victims psychologically incapable of leaving their abusers. The devastating impact this psychological conditioning has on families victimized by violence is therefore referred to as the *grooming process*.[6] As a result of this conditioning, victims often assume the blame or responsibility for their own abuse. They have been taught that they caused and deserved their mistreatment. Victims are constantly reminded that they are inadequate and that somehow they were responsible for their abusers' violent behavior.

In order to understand these families better, it is imperative to understand the family violence psychological process more fully. Batterers usually will not physically strike until they know that the victims cannot psychologically leave the relationship. The basis for this reasoning is that many batterers fear abandonment and cannot afford to lose their partners by miscalculating their victims' emotional state or possible response. They learn their partners' vulnerabilities very

well and then exploit them. Their keen ability to recognize how to groom their victims eventually makes physical violence possible. This adeptness guides them to carefully choose their victims. They know how to target their victims' strengths and weaknesses to manipulate the environment in order to meet their need for control. Once conditions are favorable for abuse, the physical violence can commence. A gradual breakdown occurs where victims' identities are stripped from them and their perpetrators' influence is all that they comprehend.

Being able to support members in family violence involves assessing and recognizing how this psychological terrorism and emotional deprivation become precursors to physical assault and contribute to victimization. Therefore, it is imperative to dispel the myth that a fight between two adults is only a private issue. This concept only perpetuates the cycle of violence, which plays a significant role in revictimizing battered families who are genuinely interested in fleeing the abusive relationship.

With our increasingly changing culture, definitions of family have also changed. Family and child advocates as well as criminal justice and other system personnel must be sensitive and respectful of these changes without judgment in order to include anyone experiencing personal violence within a broadly defined family environment. There are intimate relationships that do not fit the traditional nuclear family stereotype yet still qualify as families suffering with violence. Their plight is as significant as the traditional family and should not be minimized. These abused families may include:

- Men who are assaulted by women
- The "sandwich generation," where both grandparents and children are abused
- Same-sex relationships as well as heterosexual ones
- Step-, kinship, or foster families

Each family constellation presents a different dynamic of family violence that must be addressed individually. There is no place in these victims' lives for advocates and other system personnel who do not understand the seriousness of their situation.

Mind-set of the Abuser and the Victim

The degree of deviance in the dynamics of family violence becomes more insidious and methodical as the batterers repeatedly succeed in their psychological assaults. To prevent violence, the perpetrators' viewpoint and mind-set must first be recognized. The abusers' perspective can be outrageous, unrealistic, and incomprehensible to the average person. Their thought process generates cognitive distortion that influences their victims' perceptions, rendering victims

incapable of making informed choices. Abusers can rationalize their distorted thought process so well that the victims believe them. Consequently, batterers can manipulate and lie much more eloquently than their victims can tell the truth. As a result, many outsiders view abusees as hysterical, irrational, and unstable. Victims constantly exposed to this mindset may come to share this same viewpoint and often admit that they feel as though they are going crazy. Over time, the exposure to their batterers' frame of mind gradually breaks down the victims' self-worth and -esteem, which alters their ability to comprehend their circumstances, ultimately limiting their effective coping options. These preliminary behaviors become causal factors that allow physical abuse to eventually occur. In order to more accurately predict the progression that escalates into physical violence, we must assess the relationship between precursors and subsequent behaviors.

Some methods used to groom victims include the following:

- Isolation
- Manipulation
- Humiliation
- Guilt
- Name-calling
- Emotional deprivation
- Fear
- Sexual assault
- Terror or the potential threat of bodily harm

Forecasting these tactics can prospectively lead both victims and perpetrators toward a healthier interpersonal relationship and away from the cycle of violence. First, however, the inappropriate behaviors must be taken seriously. What much of society minimizes or overlooks is how emotional violence imparts fear and contributes to the perception of a threat. The following case illustrates this point.

Case 1: One batterer would tap a watch to indicate that it was time for a beating. In court, the abuser began tapping and the victim quickly became hysterical. The court found that the gesture was insignificant and that the victim overreacted.

The key element to consider when working with families is that emotional terror alone can control victims, even in the absence of physical violence. Most often physical assault is used as a last resort. The potential threat generates conditioning and distorts the victims' perception of reality.

Society tends to believe that couples can work out their conflicts by negotiating with each other. But in an abusive, controlling, and unilateral relationship this

means that victims must comply with their perpetrators' demands. Negotiation is never an option and compromise doesn't happen. The batterers' behavior can often be interpreted or justified as a mood or impulse that implies a temporary attitude or situation. Unfortunately, this is rarely the case. Their abusive and controlling mind-set has patterns that are perpetual and long-lasting. Stephen Hart, a Canadian expert, describes this as *ladder behavior*, which means deviant behavior ascends. He eloquently articulates this psychological process by stating, "It's the thought that counts." It is not the actual physical violation that is so important but rather the intent and the perception of the violation. Consequently, to combat the misconceptions about family violence, we must recognize its psychological and emotional implications.

Most victims, whether they are male or female, stay in abusive situations for a variety of reasons. First and foremost is the issue of children. A male victim feels the need to protect the kids and will not want to leave them alone with an abusive mother. He also fears that the legal system will rule that the children belong with their mother and therefore he would lose access to his children. A female victim fears that the abuser will follow through on his threat to prove that she is a bad mother and that she will lose custody of her children. Both fathers and mothers often worry about financially caring for their children, and they may perceive a two-parent home as more emotionally stable.

Other reasons victims stay may be attributed to their beliefs and cognitions. They have been groomed to think that they are too inept to survive in the "real" world and that no one else would ever desire them. They come to believe that they are lucky to have their relationship and should feel grateful for it. They are conditioned to either excuse or ignore the abusive behavior and accept what the abusers say as true. Some victims become overly reliant on their abusers and desperately fear independence. The abused man or woman may be mentally, emotionally, or financially dependent on the batterer. The thought of leaving the relationship generates significant feelings of loss, anxiety, or depression. These painful emotions can be so intense that they are often confused with love. Over time, the victim becomes psychologically connected to the abusing partner, making it difficult to separate. Progressive mastery of grooming techniques provides control for the batterers and keeps their victims trapped.

Family dynamics determine how individuals behave or feel as a result of the abuse. These behaviors ultimately impact the entire family and contribute to how members interact with one another. To help move them in a more healthy direction, it is important to understand how victims and abusers react to their partners. The following list reviews some of the results that occur when abusive behavior is persistent.

Characteristics typically present in victims include:

- Depression—experiences feelings of helplessness and/or hopelessness
- Anxiety/hypervigilant reactions—mimics hyperactivity or learning difficulties
- Poor self-image—behaves the way they feel, unwilling to excel or be self-reliant
- Incompetence—experiences feelings of inadequacy as a result of constant berating or browbeating
- Fear of failure—learns that making mistakes has grave consequences so they either avoid trying or strive for perfection, believing they can manage the violence
- Poor social skills—develops inadequate relationship or interpersonal skills
- Poor eye contact—generates detachment issues and potential pathologies
- Overreactive startle response—fears severe repercussions due to relentless abuse; body is held in a high state of arousal
- Inadequate protective factors—accepts that they cannot protect their children or themselves or minimize danger
- Poor impulse control—attempts to meet internal needs through external sources that can never be satiated
- Meltdowns—reacts inappropriately due to inability to cope with stress
- Regressive behavior—reverts to age-inappropriate behaviors such as bedwetting or thumb sucking
- Passive or passive/aggressive behavior—expresses extreme or improper behavior due to low self-esteem and worth; believes they do not deserve to have needs met appropriately

Characteristics typically present in batterers include:

- Pessimistic attitude—expresses dissatisfaction; rarely happy, demands perfection from others through constant criticism and coercion
- Inadequacy—projects negative self-image onto victims
- Jealousy or abandonment issues—desperately fears the loss of the relationship and uses guilt and accusations to maintain relationships
- Aggressive or passive/aggressive behavior—rationalizes that this is the only successful way to get needs met
- Controlling and excessive behavior—believe they must control environment to maintain status quo
- Unrealistic or demanding expectations—requires victims to achieve the unachievable
- External locus of control—allows external environment to control internal thoughts and behaviors; ironically this reaction gives away the very control they are so desperately trying to maintain
- Depression—generates irritability and general malaise
- Fearful—promotes anxiety and terror

- Cognitive distortion—thinks in a twisted or crooked manner and can rationalize or justify their behavior
- Trust issues—suspects others' motives and cannot trust environment to meet needs

As a result of these conditions, the toxicity of the relationship and the desperate need for the batterers and victims to bond with each other ultimately generate chaos and dissension. The link they share is referred to as *trauma bonding*. Regardless of the physical violence, the emotional connection between them is insurmountably strong. This dysfunctional interaction poisons every aspect of their lives, prohibiting a healthy and violence-free relationship. Tensions are high and generally unpredictable, so the attacks can erupt at any given moment and under any circumstance. These explosive personalities create an unsafe environment for the entire family.

Abusees may not know how to cope with the violence and may displace their feelings onto other family members. For example, children deeply struggle with their emotions, in part because they do not understand their feelings. On one hand, they might feel comfortable enough to emote or unleash their pent-up frustration onto the nonabusing parent in an effort to relieve the pressure. On the other hand, they will desperately attempt to please the abusive parent to gain validation. Essentially, victims' attempts to resolve issues never come to fruition because they hardly ever defend themselves and batterers are rarely satisfied with their family's performance. In cases where both parents are abusive, the children are faced with double jeopardy: unable to get their emotional needs met by anyone regardless of their attempts, they feel inadequate and unworthy, and view themselves as constant failures. These imprinted messages are rehearsed and embedded into their self-image. Eventually, they emotionally beat themselves up and no longer require external input. That is why it is so important to understand that a child can be taken out of a violent environment, but it may take years to take the violent environment out of the child.

Evaluating the impact that violence has on child development can generate a more accurate account of children's behaviors. When we can see their reactions as a cry for help rather than defiance, we are one step closer to the healing process. Children are our most precious investment in our future, and we are obligated to create an environment that meets their emotional needs and interrupts the cycle of violence for the next generation.

Family Violence Once Victims Flee

The social question posed to most victims is, Why did you stay? The answer is clear. Fleeing the abusive relationship guarantees the escalation of physical

violence. Batterers do not recognize boundaries. They do not understand that no means no, stop means stop, and don't means don't. Abuse is based on control, and when that control is lost (i.e., the victims flee), the batterers are placed on the offensive. Their mission, now, is to regain their position. Their objectives are often achieved through stalking their victims or creating havoc. The generated fear forces victims to return in order to secure perceived safety.

Victims and their extended families report the following list of behaviors that significantly increase when victims attempt to terminate the relationship:

- Kidnapping children
- Breaking into the home
- Killing or stealing pets
- Stealing or damaging property
- Physically restraining victims
- Stalking
- Relentless harassing telephone calls
- Threatening suicide or homicide
- Disturbing workplace, with resulting job loss for the victim
- Holding victims hostage
- Murdering victims and their children

In the face of such conditions, survival instincts may dictate victims' choices. They understand that leaving increases their risk of physical injury or even death. Statistics verify their fears. Seventy-five percent of the victims killed by intimate partners had fled the relationship.

WHY SHOULD OUTSIDERS CARE?

The community's response to family violence can, to a large extent, determine the outcome for victims—negative or positive. This section has three primary objectives. The first is to alert outsiders to many of the current procedures that unwittingly contribute to the plight of victims. The second is to demonstrate how their cases consequently fall between the cracks in the system. The third objective illustrates how the community can help save lives when it responds appropriately.

Obviously, our culture does not consciously set out to harm these families. People too often simply do not understand them. Abusers have aberrant behaviors that are difficult to grasp, and this can generate expectations for victims that are unrealistic and naive. The general population still places the onus on victims to terminate the abusive relationship. People do not fully comprehend or acknowledge the dynamics that force victims to stay. Reports by battered women and men state that they fear leaving the relationship due, in

part, to the system's lack of appropriate and immediate response to their predicament. Victims believe this indifference allows perpetrators to abuse them again and again, emotionally, sexually, and physically, with little or no ramifications. Victims realize that they are facing a double-edged sword: "Damned if you do leave, dead if you don't." Most victims truly believe that they cannot fight against their batterers and win.

An increasing number of abusers, both male and female, know how to manipulate the legal and social service system to further the assault on their runaway families. The community then generates barriers and obstacles that prevent victims from fleeing by prejudging them. Victims may hear statements such as "You made your bed, now lie in it," or "It takes two to tango." Compassion is often missing because society generally believes that the victims shouldn't have gotten themselves into this mess in the first place. Some feel if that if victims were stupid enough to tolerate the abuse then they need to figure things out on their own. Additionally, the cultural perspective often still maintains that children need both parents, whether they are abusive or not. Pressures are applied to comply with court orders; yet, we chastise victims for not protecting their children. Instead, the legal and social service systems need to recognize the impending danger and mandate treatments that work.

Contrary to what many might believe, some of the most dangerous abusers can be very much in control of their emotions. They often appear more credible in court than their victims and can usually win custody of their children based on their ability to present themselves well and to use tactics that manipulate the legal system. For example, *continuance* is a term that every victim comes to know and understand. Continuances are granted to individuals who need to extend their cases to adequately prepare for the judicial outcome. This right gives batterers the ability to prolong the legal proceedings. The perpetrators' skills along with their lawyer's creative tactics make the possibilities for continuances endless.

Case 2: One victim shared that her husband's lawyer had exhausted every possible continuance imaginable, so he suggested that the only recourse his client had was to fire him because the courts respect the right to representation. So the abuser heeded his attorney's advice, causing yet another delay. Next, he employed another lawyer who would be just as skilled. This attorney delayed filing the divorce papers so that her client could file for bankruptcy and ruin the victim's credit. Although the victim was paying her mortgage and his credit card debt, the batterer placed those items on his bankruptcy statement causing financial havoc. With time and a few thousand dollars in legal fees, she should be able to rectify this problem, but why should she have to?

The system often impedes victims' efforts to leave an abusive situation by generating case plans that are impossible to complete. Yet, they judge victims with condemnation or disgust when they stay in the relationship. Professionals working in the realm of family violence need to read between the lines and react more appropriately. One way to respond differently is to look beyond the surface. For example, victims often admit or assume responsibility for their part in the violent interaction, whereas, the batterers normally will not. Without the proper assessment skills, the easiest and least expensive means of resolving the legal conflict is to accept the victims' acknowledgement of responsibility, which relieves the perpetrators of any liability and obligates the victims to meet legal requirements. Take for instance the following case.

Case 3: A young woman fled her abusive partner with her son. The estranged husband subsequently broke into her apartment while she slept and began choking her. She dug her nails into his arm to break the chokehold, which left deep marks. The police responded and saw the injury to her ex-partner's arm. She then admitted that she scratched him. Although she had bruises on her neck, the claw marks on him seemed more serious. Rather than assessing who the real primary aggressor was, the police made a dual arrest and charged them both with domestic violence. This batterer had prior convictions, but the woman was noted as primary aggressor due to the severity of his injuries. The violence did not stop here. The batterer then threatened to get even with the victim and worked with another woman to set her up. He keyed an old girlfriend's car and got the new girlfriend to say she witnessed his wife commit the crime. The police called the victim and insisted that she turn herself in because there was a witness. While she was in jail, the victim was served with custody papers. It would appear that the perpetrator had mastered the system. And the victim's only crime was doing what society wanted her to do—leave the abusive relationship. The escalation of his behavior suggests that he recognized the potential assaultive maneuvers available to him and used them impeccably against his victim.

Researchers, therapists, and law enforcement personnel are often missing the mark. Rather than recognizing the batterers' escalating behavior as higher levels of abuse, they see these perpetrators as different types of batterers. This compartmentalization according to different types of violence fragments and dilutes the assessment, because treatment plans are not generated to measure the abuse as a sum of all parts. To adequately respond to violence, professionals need to recognize and accept that abusive behaviors accelerate to higher levels and that they do not belong to different personality types. With this assumption, we can predict with greater accuracy what victims can expect. Most batterers start out the same way, using emotional violence; then, as they perfect

their skills, they graduate to the next level. Compare the behavior with college students who are selecting their majors. Students essentially start out at the same point, taking basic core classes. When they have passed the prerequisite courses, they are permitted to take the upper level classes. Abuse is analogous. The course is Violence 101. When abusers can manipulate their victims through guilt and accomplish their objective, then they can move to the next level, which might be shame or isolation. But when society condemns their behavior and says, "This is unacceptable," the abuse is momentarily thwarted. Consequently, they either fail the course and stop abusing, or they do extra credit to continue the bad behavior. If you look more closely at the abusers' lives, most are not violent with anyone other than their partners or family, which suggests that they understand that there are no societal sanctions for their actions. The following example illustrates what happens to behavior when family members either accept or denounce the intervention.

Case 4: A couple, both with abusive tendencies, was in conflict. The wife initiated a fight then went to bed to "punish" her husband. Brooding over the "unfinished" business, he waited for his wife to fall asleep then threw a glass of water in her face. The conflict escalated and the police were called. Both were ordered into family violence treatment. The results were that the husband eventually recognized that his behavior was abusive and altered his actions. The wife, however, could not acknowledge her part in the abuse and continued using her current behavior to deal with conflict. Although both were treated, one's behavior graduated to the next level whereas the others did not.

Deviant behaviors can have distinct and predictable patterns that could be examined and profiled. Over a lifetime, batterers can have multiple victims, which suggests that they possess serial behavior that warrants study. We have developed useful profiling techniques to assess serial murderers, pedophiles, and rapists based on their behaviors. Would it not make sense, then, to evaluate serial batterers? We could predict future behavior with relative accuracy if we recognized the escalating emotional behavior as progressive. Not all cases of emotional violence erupt into physical violence, but, according to victims' reports, all physical violence started with emotional abuse.

For victims, fleeing an abusive relationship often means leaving with only the clothes on their back. Proving the abuse becomes difficult when, in the past, victims feared the possible consequences and thus rarely or never reported the assaults. Now that danger is eminent and fleeing is their only chance of survival, the onus is placed on the victims to prove to the court that their mates

are abusive. Some researchers go so far as to suggest that victims make up the abuse to harm the other parent. The term used to describe this behavior is *parent alienation syndrome* (PAS). PAS theorizes that "alleged" victims want to hurt their spouses by severing the relationship between the other parent and the children. However, although situations arise where parents pit children against their estranged partners, it is more likely the batterers and not the victims who are capable of this type of manipulation. Victims have been beaten down so badly emotionally and physically that this any attempt to deliberately alienate children from a spouse would be too frightening. It makes more sense to conclude that the batterers are the ones who use this tactic because they need to regain control. Most professionals denounce PAS and believe it to have no merit. Unfortunately, some attorneys and psychologists have been able to introduce this theory in court and victims have thus lost custody of their children. The following is an example of how a perpetrator can utilize the legal system to further the abuse.

Case 5: A vice president of a prominent bank tried to report to the doctors, police and social services that her ex-husband was sexually assaulting their six-year-old daughter. When no one would assist her, she made a desperate decision. She went into hiding in a foreign country to save her daughter from the horrific abuse. She gave up a prestigious job and salary to live in secret. Her ex-husband then hired a private detective to find the young girl. At this point, the child was recovered and the mother was arrested and put in prison for two years for denying parental visitation. Subsequently, the woman has never been able to see her daughter again and her ex-husband is free to do whatever he pleases to his daughter. The answer to the question, "Why didn't the victim leave?" is clear—leaving can mean total devastation and loss.

Yet, victims who stay jeopardize losing their children as well. A relatively new trend, which is gaining momentum and should be cause for great concern, is how child protective services (CPS) responds to children exposed to family violence. Many victims now lose their children to CPS under the guise of "failure to protect." Sometimes the assessment is so off target that CPS gives custody to the very person who inflicted the abuse. While all measures should be taken to protect children from being exposed to family violence, the system needs to ensure that social services are not generating more traumas for these families. Some caseworkers will go so far as to force interaction between parents, knowing there is a restraining order. The victims understand the eminent danger but the system often does not. Take for example the following cases.

Case 6: One social worker told a male victim, "Your ex-wife hasn't hit you for years so stop presuming she'll hurt you now." The fact may be that she hasn't hit him but she stalked him on a regular basis and was arrested several times for violation of a restraining order. Those behaviors need to be strongly considered as part of the abusive cycle when dealing with families of violence. Victims who are forced to stay in the traumatized state cannot think clearly or make informed decisions.

Case 7: A Special Advocate, or what was previously known as a Guardian Ad Litem (GAL), is a representative, usually a lawyer, who is assigned by the courts to protect children involved in custody cases. In this particular case, the GAL forced a victim into mediation, which ended with deadly results. Although the GAL reported, "That guy was the scariest person I have ever met," he still insisted that the victim negotiate and compromise with her abuser. His minimization of the danger cost the victim her life. The abuser brought a gun into the mediation process. He shot and killed his wife leaving behind two children. The GAL's response was, "The system failed this man. If we would have only let him see his children maybe he wouldn't have done this." This response completely absolves the perpetrator of his behavior and caused the victim's death. The paradigm needs to shift to see that the persons whom the system failed, in this case, were the victim and her children. The system's failure to recognize the dynamics of abuse is evident in this next case as well.

Case 8: An abusive boyfriend warned his victim, while riding home from a Christmas party, "Wait until we get home, you're in for a real beating." She frantically tried to stop the vehicle, but he punched her in the face and broke her nose. She jumped out of the car and started running down a residential street, banging on doors and pleading for help. The police arrived, and the perpetrator told them that she was drunk and tried to drive home. He said that his elbow accidentally hit her in the struggle for the keys. They arrested her for domestic violence and for disturbing the peace because she knocked on the neighbors' doors. The police did not verify her story and they never tested the man for intoxication. The woman was initially taken in handcuffs to the hospital, where the doctor looked at her and sneered, "Wow, he got you good," then he walked out of the room and left her there alone for three hours. Because she was considered the perpetrator, she did not qualify for a victims' advocate. She was forced to spend three nights in jail for a crime her abuser had committed.

Case 9: One social worker clearly discounted an accusation that a child was sexually assaulted when she declared, "I was abused by my father and I hated him. This girl loves her dad and doesn't act like a victim." What this social worker does not understand is that each victim has to access the skills she or he has learned and use them at all costs to survive. There is no place in this system

for emotional projection. A standardized list of requirements should be made to eliminate or minimize subjective assessments. With a regulated protocol, there is less opportunity for providers to be prejudiced by personal experiences. It is also imperative that providers be emotionally healthy before they attempt to assist others with victimization. Victims' reactions vary and considerations should be made for those differences. Each victim develops different degrees of coping skills, physiological defenses, and psychological perspectives. Each mindset must be respected and all efforts should be made not to minimize victims' trauma, regardless of the professionals' experience.

Case 10: A father openly admitted to a caseworker that he had been sexually abused as a child and was sexually abusive as an adolescent. He walked in on his daughters touching each other and flew into hysteria. He thought he had protected his children from his abusive family members. Now, the cycle of violence was continuing with his daughters despite his efforts. With his worst fear realized, he overreacted and inappropriately spanked them leaving bruises. He compared his reaction to spanking a child who darts out into the street—he panicked. As a result of the physical marks, the family was referred to human services where the children were immediately removed. Both parents complied with the case plan, but when they met the goal, the social worker wasn't satisfied. She decided that the mother, who was a nonoffending participant, must be mentally ill for staying in the relationship and forced her to take a psychological exam. This was clearly a misuse of power. For whatever reason, the social worker was convinced that this father was a child molester, and she had no intention of returning the children no matter how compliant the family was. The irony is that the social worker placed the children with the people this man feared most—his abusive family members.

Parents often have no recourse because child protective agencies are sheltered under the guise of confidentiality. The agencies are essentially permitted to do whatever they want without being monitored or challenged. Unless the families can afford adequate representation, the chances are great that the children will be removed permanently.

These examples are provided to alert the community (as well as advocates and service providers) that current practices should be reevaluated. Also, these professionals might want to determine whether they are genuinely being objective in their evaluations. Although it is obvious that these cases can stimulate various emotional responses, it is important to underscore the responsibility and need for an objective perspective when it comes to family violence. Depending on the worker's position and point of view, there may be an inappropriate level of sympathy or apathy toward family members. Instead, professional objectivity must rule the day.

Case 11: A district attorney (DA) insisted on incarcerating a family member even though support services were being offered and the family complied willingly. The DA became irate when the advocate said that progress was being made. The DA insulted the advocate, accusing her of being a "psycho babbler" with no interest in protecting the children. Luckily, the judge was familiar with the advocate's work and reprimanded the attorney. This DA obviously had some emotional baggage that altered his ability to adequately perform his duties.

Although these examples may make the judicial system seem inept, there are many judges, advocates, therapists, and social workers who are making outstanding strides and contributions in the area of family violence. The following case is an excellent example.

Case 12: A father physically struck his daughter, leaving a bruise across her face. Social services ordered the father to be removed from the home and treatment began. Initially, the abuser minimized and rationalized his behavior. However, with counseling and classes on domestic and parenting, he was able to recognize the gravity of his behavior and change it. This man made significant progress with his wife and children, and the family was able to remain intact.

So, when treatment and intervention programs are done effectively, positive changes can occur. As we learn how to manage the dynamics involved in family violence, our success rate can improve.

Cost to the Victims and to the Community

Family violence extends past the immediate family and impacts everyone to some degree. The cost psychologically, sexually, physically, and financially affects not only families but also the community as a whole.

This section begins with perhaps the most vulnerable—the children. The information provided here explains the influence family violence has on their development and the significant damage they experience when caught in the crossfire. Because most behavior is taught, the violence alters the outcomes of their lives. Children love their parents innately and desire harmony. Unfortunately, however, children who witness abuse rarely experience peace. They are deeply traumatized when one parent or both assaults the other. According to one study, 85 percent of one group of children who witnessed family violence displayed moderate to severe symptoms of post-traumatic stress disorder (PTSD).[7] The study also reported that exposure to domestic violence appeared to be a stronger risk factor for PTSD than being a direct victim of physical abuse. The reason this may be true is that children's

symbiotic bond with their parents is so strong that when they see the blow that created the black eye, fat lip, or broken bone, they can empathize with their parent's pain. They experience an overpowering sense of helplessness, which in turn generates guilt for not being able to control the situation. This exposure is teaching children how to treat or be treated by members of the opposite sex. Their relationship skills are being developed in a maladaptive manner, and the effects of these observed behaviors can last a lifetime.

Parents from abusive homes (whether perpetrator or victim) participate in behaviors that emotionally damage the welfare of their children. Over time, parents run the potential risk of losing their ability to recognize the protective factors necessary to keep their children emotionally and physically safe.

Case 13: One child disclosed that her abusive father would push her head under the water until she couldn't hold her breath any longer. When the mother was asked why she didn't rescue her daughter, she claimed, "Oh, her father was just playing." Regardless of what the batterer thought he was doing, the young girl was terrorized. It matters not what the inflicter feels but rather how the receiver processes or interprets the event. These families need assistance with understanding how their behavior impacts future outcomes. The system falls short when it does not adequately identify, evaluate, or respond appropriately to the severity of the abuse. Take this next court case as an example.

Case 14: A victim and two children were diagnosed with PTSD and the abuser was not. He instead was given the diagnosis of narcissistic personality. No one bothered to theorize that perhaps the reason the abuser did not suffer from PTSD or appear emotionally debilitated might be because he created the terror. Rather than look at that possibility, human services concluded that since the other parent was traumatized and emotionally incapable of caring for the children, then the nontraumatized parent was more suitable for custody.

The more deviant batterers may learn how to manipulate the system and threaten to take away the victims' children. In many cases, batterers either win custody or financially devastate their victims by taking them to court. When victims cannot take care of their children's basic needs, they feel forced to return to the abusive relationship. In an increasing number of cases where abusive men fight for custody, they win. The important role of fatherhood for a long time was grossly underestimated and prejudices worked against men, and because the court system wants to rebalance the scales of justice, they now often award custody to fathers. Unfortunately, in many of the custody cases today, it isn't the "good" guys who are fighting for their children, but rather the abusers in an attempt to control and punish their victims for running away. Abusive women are

also using the same twisted manipulation to punish their partners. The batterers' mind-set is that victims must pay for their transgressions. As a consequence, victims spend whopping sums of $20,000–$40,000 to obtain or legally maintain custody of the children, and these costs can rise as high as $150,000. In many situations, while in the relationship victims were not permitted to work or money was controlled so tightly that now financial resources are not available to fight for custody. Meanwhile, legal maneuvers by batterers, such as seeking continuances, currently cost victims at least $2,000 per hearing. The more often the abusers can drag their victims to court, the greater their chances are of financially devastating them. When victims cannot afford the attorney's fees, they are forced to give up. Someone once said, "America has the best justice money can buy." Unfortunately, children often are the ones who pay the price. More precise evaluations are needed to measure what society's next step should be in the fight against family violence. We must research and find methods to change these outcomes.

Although statistical research is undoubtedly invaluable and generates much-needed baselines for understanding the frequency and significance of victimization, one must be cautious regarding how they are interpreted. Studies can be difficult to assess. Because many are designed with a specific objective, they can represent subjective goals. Therefore, some can be misleading while others seem to make sense. Statistics in this chapter have been provided simply to underscore the large numbers of families affected by violence. Without them, the system cannot see the value in prevention and intervention treatment strategies.

In order to justify spending public funds, society appears to need facts and figures to quantify the problem of family violence. Unfortunately, it is estimated that from 50 percent to 70 percent of incidences of abuse go unreported. One study concludes that only one in seven incidences of domestic assault come to the attention of police.[8] Because of underreporting, we genuinely have no idea how many victims are suffering in silence: as I once heard it expressed, "If victims were beaten in the woods and no one was there to hear their screams, were they really abused?" The plight of battered families thus needs to be evaluated and responded to by looking past the numbers. There are still two significant elements missing from relevant quality research: the planning and executing of prevention strategies. Although we need to continue tracking the casualties, it would serve society better to preemptively respond rather than react to violence, to prevent the devastation where we can.

The single underlying misapprehension that most impedes progress is when our culture conceives the family violence problem as a gender issue. Both sides feel compelled to protect their gender as a whole rather than look for resolution. Each side's need to protect or preserve its position makes both willing to

completely disregard the other's point. There is absolutely no compromise, and when confronted with different values or agendas, the groups are like cornered dogs that bite. Blinded by their respective positions, each group becomes more strongly convinced and more irate each time the other side tries to state or inflict its perspective. The issue is increasingly polarized, and nothing is accomplished. We need to strategize, not personalize, the work ahead. This is not specifically a gender issue.

A solution begins when each participant in violence, whether victim, perpetrator, or witness, is educated on the impact the violence has on their family. The judicial system, advocates, and community leaders tend to resist acknowledging this need and taking action for two reasons. First is the widely accepted view that imposing mandatory classes further victimizes family members who are not abusive. My own experience has shown that adults court-ordered to parenting or family violence classes admitted that they would never have taken these courses voluntarily. Yet, they remarked that they enjoyed the classes because they learned skills to be better parents and partners. Most individuals don't consciously want to be violent; but sometimes, owing to generational learning, it is all they know. Once they develop better communication tools and have access to healthy alternatives, they gain personal control that makes them feel confident and competent. The old adage, "Knowledge is power," pertains here. Therefore, education should be regarded as a tool and not a punishment. Second is the presumption of innocence and our need to ensure that no one is wrongly accused and loses the right to participate in family life. If we implemented educational programs more swiftly, we could potentially prevent this occurrence. This point is made in the following example.

Case 15: In one county, a psychologist performed evaluations and therapy while families were taught parenting strategies. This type of response keeps the family intact and potentially avoids traumatizing children further. In many of these cases, removal of children generates abandonment and trust issues that negatively affect the outcome of their lives.

When families are committed to changing their behavior, the results are extremely positive and effective. So the concept isn't to change who they are but rather what they do. I personally believe that a class on family violence should be required before marriage and/or upon the birth of children. Some couples might choose not to unite if they learn that they are in a violent relationship, or they could get into couples counseling before the violence escalated into physical assault. Additionally, education could thwart the leading cause of

injury in pregnant women—partner assault. The following example is a happy testimony to the positive effects of education.

Case 16: A father was court ordered to parenting class as a part of his plan to avoid prison time. He had been convicted for running a methamphetamine lab. After his sentencing hearing he returned to class even though he could no longer use the class as leverage in court. When queried as to why he returned to class, he stated, "Well, I am still going to be a dad when I get out and I am learning a lot and my kids need me."

Drug and alcohol abuse are present in most cases where children are removed from their homes. However, this does not mean that substance abuse causes physical abuse. Permitting people to excuse their behavior because they are intoxicated takes away their responsibility for their actions. It gives them an excuse that allows them to continue hurting others. A better explanation for why substances are present in family violence is that being physically assaulted precipitates substance abuse. Generally speaking, substances serve to self-medicate and mask trauma. The numbing effects allow parents to mistreat children or to not be consciously available to meet their emotional or physical safety needs, as intoxication becomes the priority. Self-medication in the form of substance abuse contributes to the poor choices people make regarding many areas of their lives. So if we want to see substance abuse lessen, we have to stop family violence. Currently, 50 percent of male batterers and 20 percent of female victims abuse alcohol.[9] Experts agree that regardless of age, children living with family violence tend to have higher risks of alcohol/drug abuse and juvenile delinquency. Adolescents living in such troubled environments are likely to be experiencing difficulties in a number of areas, including family relationships, physical abuse/sexual victimization, educational performance, and emotional/psychological functioning. Many of these difficulties can be traced to an early age and, if not addressed, place these youths at high risk of future drug use and delinquency/crime.

The effects trickle down into other facets of society as well. Take for example the labor force. American corporations lose from $3 billion to $5 billion annually as a result of managers who were abused as children and now abuse their own employees, creating health problems, limited concentration, and poor peer relations.[10] Compound this with employees who are battered at home then attempt to work. The results are lower productivity; increased absenteeism, and high turnover rates that substantially raise corporate costs.

Assertiveness Training

To generate healthier boundaries and limitations that are respectable for all those affected by family violence, new tools must be provided. Teaching individuals how to effectively get their needs met is a great place to start. The underlying behavior displayed by abusers is aggression. They have learned through trial and error what works. An effective compromise then would be to provide assertiveness training to help families through this process. Currently, the system uses reactive and punitive approaches to dealing with violence. Batterers' intervention programs force abusers into containing their behavior and rarely teach assertiveness skills to compensate for the lost behavior. Fearing further retribution from the court system, many batterers revert to extremely passive behavior, thereby swinging the pendulum in the complete opposite direction. Unfortunately, this is as damaging as the aggressive behavior because it gives children, especially adolescents, the upper hand over their recovering batterers. The new attitude or perspective becomes, "It's payback time." The abuse and its dynamics are now transferred from one family member to the next and no resolution is made. One father called and passionately pleaded, "I need a tool to deal with this kid right now because I want to deck him. Please give me another choice."

With coaching, perpetrators and victims alike can be more effective parents. Without assistance however, the results seem black or white, right or wrong. Members of dysfunctional families use aggressive or passive/aggressive behavior because they feel that is the only way to get their needs met—not necessarily to hurt their families. The key point to make here is that most people are not bad, but their behaviors can be. When given options that allow them to have control over their lives in a purposeful way, individuals are able to replace those abusive tendencies with healthier tools and options, thus reducing the level of deviance.

Assertiveness training benefits not only the batterers, but the victims as well. When people can assert boundaries and limitations, they can protect themselves and their children against abuse. Perpetrators only hurt the people that they know they can. Establishing boundaries early in the relationship allows for healthier interactive skills. Otherwise, a breakdown occurs, and the batterers' insidious manipulation style lends itself to later emotional abuse and eventual physical attacks. To help abusers and their victims, options must be provided that make everyone feel confident and competent. These families, however, need outside assistance to make this happen. Therefore, a coordinated community response that requires communication and conflict-management skills will ensure better results.

CONCLUSION

The plight of abused families has improved dramatically over the past two decades, but there is still a great deal of work to be done. Emergency shelters, advocates, and other resources are now available to assist with the safety of many victims, but services are still lacking in important areas. For instance, very few shelters exist for male victims or for children over the age of 12. To assist all victims, we should consider their dilemma as well. Additionally, personnel working in the area of family violence need more adequate training to serve the best interest of these families. Programs must be implemented to educate parents on how their behavior influences their families.

The bottom line, however, is that in order to combat and eradicate family violence, we have to see that it exists and recognize how devastating its impact is on the world as a whole. There is a saying, "If you are not outraged you are not paying attention." We must stop the cycle of violence and alter its outcome for children, their parents, and ultimately our society. We have been successful with making driving while drunk socially unacceptable; we have made smoking in public buildings socially unacceptable. Now, it is time to make family violence socially unacceptable as well.

NOTES

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Abuse and Neglect of Older Adults: What Do We Know about It and How Can We Identify It?

Daphne Nahmiash

This chapter addresses the phenomenon of violence against vulnerable, dependent older adults, most of whom are women, who live in the community and are being cared for by or are caring for a family member, friend, or neighbor. Others are living in nursing homes or senior residences and are being abused by a paid caregiver. It is hard for us to even imagine that such violence exists and in fact has always existed. A recent study[1] from Greece notes that "ancient Greek history recorded clear cases of selfish carelessness or coarse insolence toward the old and offers instances of children taking over their parents' property . . . without proof of incapacity in the elders."

Case study: Elinor is a 64-year-old woman abused verbally and physically by her 35-year-old son, who is addicted to drugs.

"Let's talk about your relationship with your son [who] is living with you."

"Verbal abuse from all my children: my older son . . . who's a drug addict. He started on his drugs when he was 15 . . . with his friends. They started on the drugs and it never stopped. Then it went into stealing to get his drugs. I put him in jail once, which everybody thought was the worst thing in the world . . . he's been in jail three times [for] stealing. Then, he went right on and stole from me. You see my wedding rings?"

"There are no wedding rings. He stole them. All for drug deals. Now it's worse because he's on the coke . . . when he's on the drugs, it's okay. It's the withdrawal

I can't take . . . when he doesn't have any money for his . . . drugs. He's abusive . . . I have three cats, right. But when he's on withdrawal, the least little thing, there's a cup upside down or, the cats . . . he tore the place apart . . . the other day, the cat threw up in his room. He wrecked my kitchen, he wrecked it and smashed everything. He says, 'I don't have my rent.' He went from babysitter to babysitter, he did not have chances when he was young. I blame myself for his problems today and that's the guilt feeling that you get. My outlet is to have a drink when I want. I'm an alcoholic."

Elinor tells about a friend of her son's whom she had treated like a son and at one point was on drugs and was asked to leave the house. One day, he received a phone call that the friend was dead.

"He had been drinking and on the drugs. He laid on his back and choked on his vomit and suffocated and died. Now you know why he lives with me. Everybody says, 'Kick him out.' And I says, 'yeah and look at what happened to S when you kicked him out. He's dead, isn't he?' I said, 'that'll never happen to my son . . . put me through . . . hell, but I'm never going to have it on my damn back that my son died because I put his ass out. It'll never happen.'"

This case study illustrates not only the horror of elder abuse but also the complexity of family problems and relationships and why all participants have a difficult time getting out of the situations because of their beliefs and codependent relationships.

The subject of violent and neglectful behavior is increasingly becoming a topic of conversation in the media, our schools, and our social gatherings. This is not because violence did not formerly exist in private relationships in our society, but rather because we were not aware of its existence and it was a taboo subjects until the 1960s, when we first began to discuss the phenomenon of child abuse. In the 1970s conjugal violence was brought into the open, and in the past three decades people have become increasingly aware of other types of violence, such as dating violence between adolescents in schools and young adults and diverse forms of harassment in the workplace. Thus the context of elder abuse and neglect is part of a broadening awareness of domestic and societal violence. However, elder abuse has its own specific characteristics.

After establishing the extent of the problem, in this chapter I will discuss definitions of abuse and neglect and the difficulties in arriving at a common definition and terminology. I will briefly explore some possible causes and explanations. I will describe the different forms that abuse and neglect can take and present a brief outline of signs and symptoms that can help identify the presence of some types of abuse. Risk factors for abusers and victims are presented, and screening tools discussed. Finally, I will discuss some possible ways of preventing elder abuse and helping both abusers and victims.

PREVALENCE AND INCIDENCE OF ELDER ABUSE AND NEGLECT

There have not been many studies measuring the prevalence of abuse and neglect of older adults in our society. In one nationwide study[2] in Canada, 1 in 25 older adults (over the age of 60) stated that they were victims of some form of abuse or neglect, most often perpetrated by a family member. Similar estimates have been made for the United States; one study[3] reported that over one million older Americans (1 in 35) is a victim of abuse every year. We can estimate that between 3 percent and 5 percent of adults over 65 are victims of abuse and/or neglect.

In the past few years, more and more countries have been identifying the problem and finding ways to bring it to public attention. A British study[4] observed that work on abuse of older adults has been reported in 22 European countries, although much of the work is still in the formative stages. However, one study[5] compiled research from 10 countries in different parts of the world from international and cross-cultural perspectives and concluded that the problem will probably augment as a major world social problem as the overall population ages and the number and proportion of older adults increase.

All authors in all countries conclude that the topic of violence against older adults is taboo even among seniors themselves and is rarely reported. We can thus conclude that studies underestimate the number of cases of elder abuse. One study[6] has also demonstrated that there is a greater incidence of abuse and neglect of older adults (7–10%) as they become more vulnerable and in greater need of health and social services. Thus, abuse of older adults is a serious social problem that practitioners and others must recognize in order to identify, treat, and prevent it. It must also be noted that many forms of abuse and neglect of older adults criminal offenses, and when they are unreported, the perpetrators are not held accountable.

DEFINING ABUSE AND NEGLECT

Definitions of abuse and neglect are problematic. There are still no agreed-upon definitions or standardized conceptualizations, despite attempts in this direction by several authors.[7] Definitions are important because they give a clear understanding of the problem in question and differentiate the phenomenon from others. At present, terms may be interpreted differently by different authors and their meaning may depend upon the purpose of a given study. Some people use the term *mistreatment* to cover violence against older adults, others use the terms *abuse and neglect*. Stones[8] offers the following general broad definition of abuse: "a misdemeanor against acknowledged standards by

someone a senior has reason to trust." This chapter uses this definition because it acknowledges the importance of social norms in defining these behaviors. Stones has also developed EAST, a comprehensive tool that contains 71 items grouped into the following nine categories: physical assault, excessive restraint, putting health at risk, failure to give care by someone acting as a paid or unpaid caregiver, abuse in an institution, material exploitation, and verbal humiliation. In my own research I found high agreement between seniors and professionals on items that indicate greater or lesser abuse, and the items rated as most abusive were mainly examples of physical abuse. However, most researchers have chosen the following definitions to operationalize and observe the types of abuse and neglect encountered.

- *Physical abuse* includes any form of physical aggression, rough handling, burning, pushing, assault, kicking, and so forth.
- *Sexual abuse* includes any form of assault of the person in a sexual way or forcing her or him to perform or engage in any sexual activity against her or his wishes. Sexual abuse is often part of physical or psychological abuse, but it is kept as a separate category because it is often not identified by health and social practitioners or older adults themselves.
- *Psychological abuse* is when the older adult is subject to repeated or chronic verbal assault that insults, threatens, humiliates, or excludes. Lack of affection, betrayal, social isolation, or denying the chance to make or participate in decisions that pertain to the individual's own interests are included.
- *Material/financial abuse* (sometimes called *exploitation*) involves misuse of the senior's money, possessions, or property. It includes fraud or using the senior's funds for purposes contrary to her or his needs and interests. This type of elder abuse has been noted as the most common, possibly because seniors themselves find it relatively easy to identify.
- *Passive or active neglect* involves the withholding of items or care necessary for daily living. This type of abuse can be intentional (active or physical) or non-intentional (passive), and it is most common among seniors living in institutional milieus.
- *Self-neglect,* or an individual's failure to provide adequate care for herself or himself, has also been identified as a form of elder abuse and is the most common type of mistreatment identified by Adult Protection workers. Although there is no outside perpetrator of this type of abuse, relatives or others may be aware of the problem and fail to help.
- *Violation of a person's rights* has also been recognized as a form of abuse. This consists of preventing an individual from making personal decisions or forcing the individual to do something against her or his wishes, such as going go to a nursing home. Other authors include this in the psychological abuse category.

  - *Social, systemic, or collective abuse* has been identified as a societal form of abuse. It includes ageism and other ways of treating elderly persons that affect their personal dignity and identity. This type of abuse was highlighted in a British study[4] that pointed out that abuse and neglect are socially structured through a range of policies and professional ideology relating to dependency in old age. Some authors include this type of abuse and neglect in the category of psychosocial abuse.
  - *Care abuse* is abuse which is perpetrated by the care receiver toward the caregiver. It is usually reported among caregivers responsible for an older adult who is suffering from dementia or mental illness; according to one study,[4] care abuse represents about 3 percent of the overall abuse.

Few studies have taken into account how multicultural or aboriginal groups define abuse and neglect. Most studies ignore cultural nuances and seem to assume that all seniors are similar in their attitudes and perceptions. Thus future studies should pay attention to particular subgroups, because each society and group has different standards and norms as to what constitutes abusive and neglectful behavior. Some standards and norms are laid down in the criminal code or the charter of rights; others are laid down by organizations and in professional codes of ethics, but those presenting the most difficulty are usually defined by common consensus within a society or group.

Psychological abuse and some types of neglect or self-neglect tend to fall into this consensus-based category. For this reason it is a good idea to try to arrive at common meanings for the definitions used. It is also important to note that often several types of abuse or neglect are present and there is sometimes more than one abuser. Occasionally abuse is mutually perpetrated by both the older adult and the caregiver, especially in cases in which there is mental illness or dementia.

IDENTIFYING VICTIMS OF ABUSE OR NEGLECT

My collaborator Susan Kurrle and I, in a book chapter on geriatric medicine,[9] identified some common indicators of the main types of elder abuse and neglect. We are presenting these along with some additional signs and indicators in Table 3.1.

PERPETRATORS AND VICTIMS OF ELDER ABUSE

Authors have noted in all studies and articles that abuse and neglect of seniors is a taboo subject. Seniors themselves rarely report being the victim of abuse and neglect, either in the community or in an institutional setting. Further, in different cultural milieus abuse and neglect may be accepted or unrecognized. For example, in some families screaming insults and obscenities

Table 3.1
How to Recognize Abuse and Neglect

Type of abuse or neglect	Signs to look for
Physical	
Evidence of punching, kicking, biting, burning, pushing, dragging, shaking, or arm twisting; , physical restraints such as being tied to a bed or chair or being locked in a room.	Presence of bruises, abrasions on face, forearms, or lower legs (history of unexplained accidents or falls). Bald patches on head or bruising on scalp (possible hair pulling). Black eyes or bleeding in white part of eye. Swelling in lips or nose, lacerations, and missing teeth. Fractures of skull, nose, and facial bones. Bruises on arms due to belt buckles, walking sticks, hair brushes, or ropes. Pinch marks or grip marks on upper arms. Bite marks or scratches. Burns from cigarettes, chemicals, ropes, hot or boiling water. Fractured ribs related to being pushed against an object or furniture.
Sexual	
Evidence of sexual assault or unwanted affection or touching.	Bruising, bleeding, or pain in genital areas. Torn, stained, or blood-stained underwear. Evidence of sexually transmitted diseases. Difficulty walking or sitting.
Psychological	
Evidence of mental or emotional anguish; repeated shouting at the person, threats, or humiliation. Emotional isolation; i.e., left alone in a room all day, withdrawal of affection. Emotional blackmail or infantilization of the person.	Huddled body position, nervous around the family or caregiver. Insomnia or sleep deprivation. Loss of interest in self or environment. Fearfulness, helplessness, hopelessness, passivity, resignation, or withdrawal. Paranoid behavior or confusion not due to dementia. Anger, anxiety, frustration, or agitation. Ambivalence toward the caregiver; reluctance to talk when caregiver is present, avoiding eye contact.
Material / financial	
Evidence of improper use of the person's property, money, or assets.	Loss of money, bank books, checks, or credit cards; cashing large checks or sudden, unexplained withdrawals of money from bank. Sudden inability to pay bills or buy food. Receiving incorrect change from the person purchasing the food or goods. Loss of jewelry, silverware, paintings, furniture, or sculptures. An unprecedented transfer of money or property to another person (often a child or nephew/niece). A new will is drawn up. Power of attorney or mandate improperly obtained from someone mentally competent.

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Table 3.1
(continued)

Type of abuse or neglect	Signs to look for
Active or passive neglect	
Evidence of deprivation of the basic necessities such as food, medication, drink, clothing, care, etc.	Malnourishment due to lack of food and drinks, weight loss, wasting and dehydration (without an illness-related cause). Constipation or fecal impaction, inadequate or inappropriate use of medication (over- or undersedation). Decaying teeth, lost or nonreplaced eyeglasses, hearing aids, walkers, or other necessary prostheses. Poor hygiene or inadequate skin care (dirty and smells strongly of urine or infested with lice). Urine rash with excoriation and chafing. Clothing is dirty and in poor repair or inappropriate for the weather or gender. Pressure areas over the sacrum, hips, heels, or elbows. Withholding of medical or nursing care and attention.
Self-neglect	
Evidence of an older adults who lives alone in housing and living conditions that are unsanitary and unsafe for the person or others.	Presence of poor hygiene, inadequate skin care, strong odor related to the person or living area, dirty clothing in poor repair, clothing inappropriate for weather or gender. Sometimes may have no clothing, decaying teeth, overgrown nails, malnourishment, weight loss, wasting, and dehydration. Constipation or fecal impaction. Inappropriate use of alcohol, medications, or other substances. Bizarre behavior that includes disturbing others. The adults often have a long history of mental illness.
Violation of a person's rights	
Evidence of forcing a person to do something against their wishes or intentionally depriving them of their rights.	Being forced to live in inadequate housing against the person's will, for example a nursing home or in a son's or daughter's home (often to save money). A landlord who is not doing appropriate repairs to the person's property or who is raising the rent too high. A child who is refusing to allow a grandparent to see his grandchildren.
Social or systemic abuse	
Evidence of discrimination against an older person on account of his or her age. Institutional or systemic abuse of an older adult through practices that deny the person's dignity or identity.	Societal images or depicting seniors as marginal, frail, vulnerable, and dependent (through media, policies, and laws). Discriminatory social policies for older adults, such as inadequate pensions, etc. Conditions in societal systems and institutions for older adults that impair quality of life. Institutions that do not uphold rules or that provide substandard care; for example, seniors suffering from dementia may be mistreated because caregivers are ignorant of how to treat these patients.

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(Continued)

Table 3.1
(continued)

Type of abuse or neglect	Signs to look for
Career abuse	
Evidence that an older adult is abusive physically, psychologically, or financially toward the caregiver.	Usually a situation in which an older adult suffers from mental or emotional illness or from dementia and mistreats the person providing their care. Sometimes codependent relationships in which the senior is abused and abuses the abusive caregiver in turn.

may have been a way of life for decades, and many different interpretations of what constitutes appropriate and inappropriate behavior still exist.[9] Until recently it was difficult to penetrate these groups to provoke some discussion and awareness. Nevertheless, it can be stated that elder abuse is experienced by both men and women, and victims may live in their own homes, share their homes with others, or live in nursing homes, residences for the aged, or long-term care facilities. It is also known that such inappropriate behaviors are for the most part perpetrated by unpaid caregivers, mainly family members, but also by paid caregivers, mainly in institutions, and that all these abusers are held by the older adults to be in a position of trust.

Beyond these general conditions, several studies have identified more than 40 indicators that predict whether older adults are likely to be abused and neglected and whether caregivers, paid or unpaid, are likely to perpetrate such abuse. These indicators have been summarized in several book chapters.[5,9–13] The main characteristics of abused and neglected older adults are summarized in the following 12 indicators:

Characteristics of the Abused

1. Gender: mostly women, although a few studies have found more men
2. Marital status: mostly widows or spouses
3. Generally in poor physical or mental health
4. Advanced age
5. Substance abuse
6. Living arrangements: usually with or in close proximity to the abuser
7. Psychological factors: depression, stress or resignation
8. Presence of problem behavior, often related to dementia or mental illness
9. Dependence in terms of activities of daily life
10. Social isolation
11. Reports history of relationships problems
12. Reports current marital or family conflicts

Characteristics of the Abuser

Eleven characteristics of the caregivers have also been reported in the same studies. These are:

1. Substance abuse (mainly alcohol) or gambling
2. Emotional illness (depression often associated with caregivers who care for persons with dementia or mental health problems).
3. Mental health or behavioral problems; personality disorder.
4. Reports poor or lacking social supports
5. Lack of caregiving experience
6. Reports reluctance to be a caregiver
7. History of abuse
8. Dependency (often financial) on the care recipient
9. Confusion and dementia (an older caregiver's spouse)
10. Reports feeling burdened and stressed in the caregiving experience
11. Personality traits related to control, depression, and blame; being overly critical and unsympathetic

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Case study: Mary is a 73-year-old divorced and separated woman who is the mother of 13 children and is abused physically, financially, and psychologically by two of her sons.

"It's been a long time that I'm fighting violence. I accepted it. It happened . . . I've had three phases of abuses . . . I've had my husband. I divorced because he was too violent. He was a boxer . . . I had seven children and he became really violent, especially related to drinking . . . he gave me bad treatment, hit me, hit two of the children. I started a second page of my life. I wasn't a victim of violence. I was in the work market. I was doing fine . . . the children started growing up and my husband was coming back . . . Every week he started to be violent towards me . . . it started to get rough. But let's say since the Golden Age, it's important to note that I was victim of violence."

She explains that this was after the separation and death of her third common-law partner when her sons became violent.

"He didn't directly hit me . . . it's the alcohol . . . when he arrives home, there is arguments . . . they all have problems. One it's drugs, hard drugs. Another it's a separation, it's difficult he's not working. He didn't hit me, he hit his brother and I put myself in between and, of course, I got a little hit there because I got pushed against the wall . . . it goes back about four or five years . . . the police arrived. I called the police. I had to arbitrate, separate . . . he held my arm a little tight, but not really that tight for me not to be able to work so I was trying to stay in between both and the fight continued. He still succeeded in hitting . . . it's been three times that it happens like this. It's the police who brought the charges. This morning I cut his sentence by one year . . . because he's too sick. He's discouraged . . . he's a

guy who's lost everything. He takes drugs . . . he is always depressed, sick and a little desperate. Sometimes . . . he take me by the ropes of the heart [pulls at my heart strings]. I try to help him get along as much as I can.

"If he's drunk . . . he wants money. He's going to steal a radio . . . a sound system. I'm well aware that lots of people, 60, 65 that are victims of violence by their children. It happens. I don't know why."

"You have only your pension?"

"Yes, but even then it's not much. It's poverty level, in the bottom of poverty. I can't manage so it creates difficulties. It's been two years . . . violence with words and threats . . . I went to court this morning. I have about half of an apartment and to be robbed by (my son).

"Maybe, the abuse happens because I support them . . . help them . . . open the door . . . tolerate them. If I didn't have a sensitive heart . . . I think these are my sons. Eventually they'll understand . . . If I'd been more authoritarian, maybe the father would have been avenged instead of me. I am still convinced they can get out of it and I am hopeful. I'd have to completely kick them out . . . but I give them one more shot."

This case study shows how the learned gender role of a female caregiver and mother who sacrifices herself for the family contributes to the continuation of the pattern of abuse. It shows how alcohol and drug abuse, if untreated, contributes to violence and abuse, long part of this family's history. Another issue raised is how helpful the criminal justice system is in solving crimes of this type. This elderly mother was severely physically abused three times by her sons, and each time the judge allowed the middle-aged boys to come back and live with their mother, so that the abuse started all over again.

Besides the personal characteristics relating to the abused and the abuser, researchers have identified some characteristics in the social, cultural, and economic environment that may indicate abuse and neglect. These are as follows:

The Social Context of the Care Situation

Six indicators have been related to the social context of the care situation:

1. Financial problems (from unemployment or welfare)
2. Family violence, especially related to physical and psychological abuse
3. Lack of social support
4. Family disharmony
5. Living arrangements (lack of privacy, overcrowding, and substandard housing conditions)
6. Intergenerational transmission of violence (violence that has existed for a long time within the family relationships and is passed on from generation to generation)

The Cultural Context of Care

Attitudes, beliefs, and values can determine whether individuals engage in or deter from engaging in the abuse and neglect of older adults. Six such indicators have been identified:

1. Ageist attitudes, beliefs, and policies (discrimination against an older adult or group on account of their age)
2. Sexist attitudes, beliefs, and policies (discrimination against an older adult or group on account of their sex)
3. Cultural beliefs and attitudes about violent behavior (e.g., abuse is perceived as a "family affair")
4. Reactions to abuse (personal beliefs due to religious convictions, family, or cultural backgrounds may influence help-seeking behaviors and patterns)
5. Negative attitudes toward the disabled and sick
6. Imperatives for family caregiving (expectations and perceived obligations)

The Economic Context of Care

Four indicators are observed that influence abusive situations:

1. Poverty
2. Limited finances
3. Lack of informal resources to help (other family members who could help provide care)
4. Lack of formal resources, or services that are too costly

Six Key Risk Factors Associated with Abusive and Neglectful Care Situations

Although many risk indicators have been identified in the studies and combinations of these indicators have been found in all types of abuse and neglect cases, it is still difficult to clearly state which particular indicators will appear in which scenarios. However, six indicators have been found to exist in all studies and in most abuse cases, and will be discussed in more detail in this section. These are:

- Codependent relationships
- Social isolation; lack of social support; keeping abuse and neglect a family secret
- Substance abuse by perpetrators
- Living arrangements
- Gender issues
- Depression and loss of identity

Codependent Relationships

The existing literature and my own research[9,11–13] show that abuse and neglect situations usually, though not always, also involve codependent relationships between the perpetrator of the abuse and neglect and the abused individual. Furthermore, these codependent relationships prevent the abused persons from moving out of or reporting their abusive situations. For example, I have observed many older women who did not tolerate the abusive behavior of a spouse and divorced him, but nonetheless tolerate physical, psychological, and financial abuse from their middle-aged sons who have a drinking or drug problem. The mothers explain that if they separated from these sons, the child would fall ill or become suicidal and the mothers would feel responsible. The sons depend on their mothers for food, money, and housing. Some mothers say they are afraid to live alone, and living with their son provides companionship and security for them. Others depend on their sons for their activities of daily living, such as grocery shopping. The mothers feel they have to sacrifice themselves for the well-being of their children.

I also observed that both the abused adult and the abuser in the codependent relationships are in a cycle of powerlessness that results in a loss of identity for both the abused and the abuser. They are unable to act or move out of this cycle of powerlessness. One study[14] compared groups of older battered women and found that the wives were more likely to be dependent on their husbands for some instrumental activities of daily living, and the husbands depended upon them for emotional support. Adult children were usually dependent on their mothers for housing and financial support, whereas the mothers depended on them for activities of daily living. The husbands of the battered women were more likely to use physical aggression against their wives than adult children against their mothers, but the verbal aggression shown by adult children was perceived to be more serious than similar acts by husbands toward their wives.

Social Isolation, Lack of Family Support, and Family Secrets

Social isolation and lack of social support are important risk factors associated with abuse and neglect situations.[15]

The isolation contributes to the persons continuing to stay in the abusive situation because the victim has no one to whom to complain. The abuser encourages and forces the person to stay in an isolated situation so that the abuse will continue to be tolerated and will go unreported. This type of situation is frequent in cases of older spousal abuse, usually by the male spouse. The male threatens the spouse that if she confides in friends or reports the abuse

to another family member, the violence will augment. These are unequal power relationships and result in controlling the wife and keeping her in an isolated situation. Ménages à trois, or situations involving three individuals living in the same household, have also been observed to demonstrate the same dynamics. In some of these situations, the wife remained in the abusive situation, playing the role of perfect wife to save her marriage, in spite of the fact that the husband's lover was in the situation for many years. Similar situations have been observed in same-sex relationships.[16]

Substance Abuse

Abuse of drugs and alcohol is frequently associated with caregivers who are abusive. For example, under the influence of alcohol a son physically and psychologically abuses his sick mother, who cannot defend herself because she suffered herself at the hands of an alcoholic father who physically and psychologically abused his children. Another son, addicted to cocaine, abuses his mother physically and psychologically in order to extort money from her to pay for his drugs. The relationships between the mothers and sons, daughters or spouses are usually codependent relationships. For example, a battered wife was buying the beer for her husband who abused alcohol. She was emotionally dependent upon her husband and could not leave the situation. Caregiver sons who have gambling addictions were also associated with abusive behavior and codependent relationships with family members.

Living Arrangements

Living in the same house, nursing home, or residence as the abuser has also been found to be a factor frequently associated with abusive behavior toward older adults, especially in cases of neglect, which is most common in nursing homes and residences and in cases of conjugal violence. Sometimes the abused and the abuser do not live in the same house but live in close proximity to one another. It is evident that it is easier for an individual to mistreat another person if they live in close contact. For example, one case of abuse started between a mother and her daughter when they copurchased a duplex and moved in together. An older man, after the death of his wife, was persuaded to move in with his son's family and was severely neglected by them. Another man who developed Alzheimer's disease was abused physically when his wife could no longer take care of him and a social worker moved him into a private residence for older adults. The move happened so quickly that the man's wife did not have a chance to check out the quality of care provided by the residence in advance, a step that might have prevented the abuse incident.

Gender

Most studies have shown that older women run more risk of being abused than older men.[14] However, it has also been observed that as many men as women are exploited financially and physically.[17] Nevertheless, in cases of physical abuse the consequences of the abuse have been found to be more serious in women than in men. As will be discussed in greater detail below, learned gender roles have also been observed to be associated with abusive situations.

Depression and Loss of Identity

In several reports,[18] it has been observed that abusive caregivers often show symptoms of depression, and sometimes they, as well as their victims, have even attempted suicide or have ideas of taking their own lives, when they both feel powerless to remove themselves from the situations they are in. They describe their situation as "like living in a black hole" or having no meaning in their lives. Some females feel that they have always cared for others and never had a life of their own, and thus have lost a sense of their self or their own identity; for other, their only sense of identity is that of their abusive husband or child. Even after an abusive husband dies or is placed, an abused female may still believe she needs his permission to act.[9,12,14]

POSSIBLE UNDERLYING CAUSES AND EXPLANATIONS FOR ABUSE AND NEGLECT OF OLDER ADULTS

Many explanations have been put forward about why seniors experience abuse and neglect. This chapter will not discuss these theories at length, but will merely point the way for readers to find out more about some of the explanations.[19]

The four principal theories explaining abuse and neglect of older adults are as follows: the situational model, the social exchange theory, the symbolic interaction model, and the empowerment model.

1. *The situational model* suggests that acts of abuse are an irrational response to environmental conditions and a situational crisis. The situational variables are (1) those associated with a caregiver, (2) those associated with an older adult, and (3) additional sociostructural factors, and the three elements interact with one another to produce an abusive situation. However, this theory has not yet been proven, and two studies actually contradict one another.
2. *The social exchange theory* assumes that older adults have less access to power and resources and are progressively more vulnerable and less able to perform their activities of daily living than young adults. However, other

studies have demonstrated that the abusers are also vulnerable and dependent upon the abused adults.

3. *The symbolic interaction model* posits that abuse and/or neglect is a process involving at least two persons. It is produced over time and is composed of several repetitive steps, which are interrelated and which involve constant negotiations and renegotiations. This model is based on the social learning, family violence, and feminist theories, in which abuse and neglect is seen as a recurrent cyclic phenomenon in the family associated with past violent relationships. However, this model does not apply to all types of abuse, in that not all are rooted in family violence.

4. *The empowerment model,* which I use, sees both perpetrators and victims as being in a process of powerlessness from which they cannot extract themselves due to a number of varied explanations, including those mentioned in all the above theories. Being able to extract oneself from a position of powerlessness involves a struggle, the use of resources and strategies, the development of a personal identity and awareness of one's situation, and a critical knowledge and understanding of the forces that reshape one's social and political environment. Furthermore, individuals need to develop a greater knowledge and reaction competence to attain their personal and collective goals.

Using the empowerment model, the dicussion will next turn to how abuse and neglect can cause an inability to act and feelings of powerlessness to change or move out of the situation.

WHY VICTIMS AND PERPETRATORS OF ABUSE AND NEGLECT FEEL POWERLESS TO CHANGE THEIR SITUATIONS

Below are some examples[14] of abused older adults who feel powerless to move out of their situations, followed by examples of some caregivers who feel powerless to change their situations. Assessment of their family histories, gender roles, cultural contexts and their environmental situations can help explain their feelings of powerlessness.

Powerlessness in the History of the Family

A caregiver of a sick husband was being sexually abused by her 40-year-old son, who had left the house but was constantly bargaining with his mother to let him back in. She feels responsible for his welfare as a mother and a caregiver because she is a survivor of the Holocaust and feels she survived in order to be able to take care of her family. There is a direct relationship between the oppression experienced by the mother in the concentration camp and her abusive situation with her son. She claims, "I can do nothing . . . I cannot leave . . . I have to

be here . . . I was condemned to death and I survived. Now I condemn myself to life." The sexual abuse began shortly after the son's wife divorced him, leaving him unable to control his life, dependent on his mother, and powerless.

Gender Issues

Learned gender roles of female abusers and abused older adults have been associated with abusive situations and the victims' inability to extract themselves from the abuse and neglect.

Bertha is a 69-year-old woman who has been forced into the role of caregiver and protector of her family ever since she was a child growing up with a physically abusive alcoholic father. Even though she seems to be a relatively strong and autonomous woman in general, she is unable to defend herself when her son and daughter-in-law attack her physically and psychologically. She says, "I just went helpless. I was in shock . . . Oh probably if it wasn't one of the family I could defend myself . . . because you have been nurturing your brothers and sister, you still have that sense that you have to protect somebody."

Cultural Context

Different cultural values, religious beliefs, and class positions can also contribute toward maintaining the abuser and the abused in a powerless situation.

An 83-year-old Indian man was neglected and abused by his common-law North American spouse and three stepchildren. He describes a complex clash of learned cultural values and beliefs from two different societies which especially manifest themselves in relation to ideas about punishment for the children and stem from the victim's own experience of punishment at school. He explains how when he found the children had stolen from him. "My punishment for them was to write lines . . . So that's the way I was brought up when I was punished in school . . . I was like, from the old school." His spouse resented him punishing her children, and this led to an incident of severe physical abuse of the older man. The stepchildren were stealing money from man because they thought he was old and could not defend himself: "'Look, you're going cuckoo, you're losing it. You're going senile.' Sort of like telling me, you're not thinking properly." These are also ageist attitudes internalized by the children and contributing to the man's feeling of powerlessness. Economic and class issues were also involved in this abuse case, because the common-law spouse and the children were attracted to moving in with the man because of their own poor economic circumstances and feelings of powerlessness.

Environmental Context

Social and environmental factors also contribute to how an abusive situation can develop and keep abusers and abused persons in a powerless situation. Living arrangements most often illustrate these situations, whether they occur because an older adult is moved into a nursing home or residence for seniors or moves into a living arrangement with adult children and grandchildren who benefit from the move for financial reasons.

In one case,[21] an abusive situation developed when a young couple moved next door to an older couple and felt they could exploit the seniors by taking over part of their property. The younger couple perceived the seniors to be too old to defend their rights. As the older spouse stated, "He [the neighbor] would do crazy things so we couldn't get out. It was like that for three years. We were stuck . . . They hosed us, hosed us in our yard, spit on our yard, waited for us at 10:00 at night . . . I couldn't handle it anymore. I could only see black . . . I was loving weight and I was sick. I was admitted four times at the hospital by ambulance . . . If it would have been somebody young, that would have thrown them . . . but they knew they were dealing with an old woman crazy and an old man so they took advantage of it." The older woman's vulnerability and powerlessness are directly related to her living arrangements and the behavior of her new neighbors toward her and her disabled husband. She describes her feelings of powerlessness as "not capable," "giving up," "can't handle the situation," "hitting a wall," and "can't fight," all of which led to an inability to act. The situation was eventually resolved, not because justice was done but because the neighbor lost his job, becoming also powerless, and had to move away.

WHAT CAN WE DO TO HELP? SIX EMPOWERMENT STRATEGIES

Many strategies have been described which involve using screening, evaluation and clinical tools to intervene in and prevent such cases of abuse and neglect of older adults.[21–25] It is important to note that effective preventive strategies involve addressing the problems of the caregiver abusers as well as the abused or vulnerable seniors. In many cases there are several abusers and also many types of abuse present, and all must be addressed. In addition, sometimes when one type of abuse, such as physical abuse, is stopped, another type, such as psychological abuse, may become more severe. Most of the documented intervention models fall into the categories of family violence, family therapy, social action, adult protection services, or multidisciplinary-based interventions. Space constraints in this short chapter make it impractical to describe the many existing models or the tools used, but and readers may refer to the

books and articles noted in the reference at the end of this chapter. However, seven strategies that help abused persons and their abusers move out of their powerless and abusive situations to empowerment are presented: use of a facilitator, telling the story, transformation of energy, action, documentation and resolution of the problems, offering resources and referral, and self-control.

The Need for a Facilitator

Since situations of abuse and neglect force older adult victims into a process of powerlessness and an inability to act, the abused may be unable to move out of their situations without the help of another person, referred to as a *facilitator*. Abusive caregivers are also in a powerless position in their lives through their inability to move out of their dependencies on drugs, alcohol, or other problems, and they, too, need an independent facilitator to help them move out of their situations.

Telling the Story

The process of recognizing that a person has a problem and identifying the problem is the first step to solving it. Thus, the facilitator helps individuals describe through their family history, cultural history, and context, assessing their gender roles and responsibilities and environmental situations to determine how they and their abuser got into the abusive situation. As individuals tell their story, they are able to reflect on the circumstances that created their situation and develop insight and awareness into the forces that shape their present reality. The role of the facilitator is mainly to listen carefully and guide each individual in exploring the issues.

Transformation of Energy

By describing the situation in great detail and developing a critical awareness about the reasons why the individual is in the current situation the negative elements blocking the individual's energy are released and replaced by positive energy flows which enable the individual to be able to act to develop strategies to move out of his or her abusive situation.

Action

Many strategies and actions are used by the abused individuals to help them move out of their situations. These include confrontation of the abuser, breaking their silence and the isolation that has maintained them in an abusive situation, participation in a self-help group with people experiencing the same or

similar problems, returning to school to educate themselves or finding employment, participation in community activities, participation in caregiver support groups, obtaining information about rights or how to use the criminal justice system to protect themselves from the abuse and neglect situations.

Sometimes, especially in the case of more vulnerable older adults, someone is needed to accompany the person through the process. Victims' rights and advocacy organizations often have such resources available.

Documentation and Resolution of the Problems

It is extremely important to document carefully in writing or by tape recording the sequence of events leading up to and involved in the abuse situation and the steps and strategies taken or to be taken to help the person out of the situation, especially in cases in which specific crimes are committed. Photographs and videos are effective means of producing hard evidence of such crimes. This documentation should be done as soon as possible while the events are still fresh in the minds of the persons involved.

Other strategies to solve problems could involve changing the locks of the house to ensure the abusive caregiver may not return. Arrangements can be made for pension checks to be deposited directly into a bank account to prevent an abusive nephew from stealing them. A court order may be needed to remove an abusive relative from the home.

Offering Resources and Referrals to Other Services

A variety of public and private services may be needed to assist abused seniors or their abusers during this time. For example, home care services or respite services and post-traumatic stress counseling can be helpful for abused seniors. Caregivers with substance abuse or gambling problems should be referred to appropriate treatment programs. Adult protection services are available in many states and provinces in North America. A range of strategies and interventions are also used in nursing home and long-term care hospitals, such as reporting systems, quality assurance programs, and so forth. Police services, notaries, day care centers, and activities can help prevent seniors from experiencing social isolation.

Self-Control

In the final step, the formerly abused senior or abusive caregiver has solved the problem and is once again in control of life. This step may entail finding time for a break from caregiving, such as having lunch once or twice a week with friends, or planting a small garden. Older adults and caregiver should be

encouraged to think of and satisfy their own needs and not only the needs of others by finding pleasurable activities.

CONCLUDING REMARKS

This chapter's focus has been the prevalence of abuse and neglect of older adults by people in a position of trust, defined as paid or unpaid caregivers. The present estimates of abuse and neglect may only represent the tip of the iceberg: we are living in an aging society, and abuse and neglect of older adults is higher among those who are frail and cannot defend themselves.

The chapter presents the ways in which abuse and neglect manifest themselves and the characteristics of those who are abused and those who abuse. In particular, the six key risk factors associated with abuse and neglect situations are noted.

Finally, the problem of why older victims of abuse and their abusive caregivers feel powerless to change their situations is addressed. The discussion touches on some ways which can be used to help, in particular, six strategies that can move the abused or the abuser to a process of empowerment and out of the abuse situations.

There is a need for far greater awareness of the problem of abuse and neglect toward older adults. More resources and services need to be coordinated and made available by governments and organizations, so that seniors can live out their lives in comfort and security.

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Homicide-Suicide: An Overview

Julie E. Malphurs and Maria D. Llorente

Las Vegas, Nevada, March 2005: A man shot and killed his wife in the middle of a busy intersection last night then turned the gun on himself. The woman jumped out of a car in the intersection and ran toward the median, the man following her. He fired, she fell to the ground, and then he stood over her and shot her in the head at close range. The man then shot himself in the head. Detectives said that it appeared that the victim was the estranged wife of the killer and that the couple had a history of domestic violence.

Boston, July 2005: The deaths of a mother and her nine-month-old daughter, who fell from a downtown high-rise apartment, have been ruled a murder-suicide. Detectives said that two suicide notes were found, one on the woman's body.

Garner Valley, California, May 2005: A 44-year-old man shot and killed his 14-year-old son, 10- and 8-year-old daughters, his 75-year-old mother, and his wife before dialing 911 and shooting himself with a 9-mm semiautomatic handgun. Neighbors and friends told reporters that there was nothing about his behavior prior to this incident that would have indicated he was capable of such action.

Killeen, Texas, July 2005: Police have indicated that the deaths of two soldiers this week have been ruled a murder-suicide. Officials found the female victim on the front porch of her home, shot in the head. Her estranged husband was found a short time later in the parking lot of an apartment complex across the street with a self-inflicted gunshot wound to the head. The couple had a violent domestic history, and a two-year protection order had been issued last week ordering the husband to stay away from his wife.

Chesterfield, Virginia, July 2005: A murder-suicide has left a mother and her two daughters dead of gunshot wounds. Investigators believe that the 36-year-old mother fatally shot her daughters and then killed herself.

Columbus, Ohio, May 2005: An 18-year-old shot his grandparents, his mother, his sister, and two of his friends while they were sleeping. The young man, who was to graduate from high school the next morning, then shot himself in the head.

The events described above are just a sampling of homicide-suicide events that occurred within a five-month period in 2005. *Homicide-suicide*, or *murder-suicide*, refers to violent events in which a perpetrator takes his or her own life either immediately or within a very short time after killing one or more victims. Homicide-suicide is a psychosocial and public health problem. Homicide-suicides are rare relative to suicides and homicides, but these lethal events are an emerging public health concern. Homicide-suicides are nearly always committed by a man, typically involve family members, and nearly always involve a firearm.

Homicide-suicides have a mortality count similar to meningitis, pulmonary tuberculosis, influenza, and viral hepatitis,[1] and the rate may be increasing in the United States, especially among older persons.[2–5] Homicide-suicides have a traumatic and lasting impact on the health and well-being of family covictims and disrupt the communities in which they occur, especially when they involve mass killings.

Several prominent homicide-suicides have received national attention. In May 1998, a 23-year-old corporal in the Pope's Swiss Guard killed the newly appointed commander of the Guard, age 42, and his wife before turning the gun on himself in the Vatican. Also in May 1998, the comedian and actor Phil Hartman, age 49, was shot and killed by his wife Brynn, age 41, before she committed suicide in Los Angeles. The tragic mass killings of 13 people by Eric Harris and Dylan Klebold at Columbine High School in Littleton, Colorado, that occurred in April 1999 were a homicide-suicide event. Atlanta day trader Mark Barton killed his wife and children at their home and then went to brokerage offices and killed nine more people before killing himself in the summer of 1999.

EPIDEMIOLOGY OF HOMICIDE-SUICIDE

The rate of homicide-suicide in the United States is relatively stable, averaging .20–.30/100,000, and ranging from .19 to .55 per 100,000 persons.[6] From 1.5 percent to 4 percent of all suicides and 5 percent of all homicides in the United States occur in the context of homicide-suicide.[7–10] Homicide-suicides,

reported in terms of percentage of total suicides, vary regionally in the United States, but average between 2 percent and 4 percent. Suicide pacts are not classified as homicide-suicides because there is mutual agreement of death between two persons; suicide pacts are thus excluded from all reported rates of homicide-suicide events.

Although there is no national surveillance system for homicide-suicides in the United States, they are estimated to account for 1,000–1,500 deaths a year. Marzuk and associates[1] derived this mortality count from the results of a *Time* magazine national survey of all deaths by guns in a one-week period, where 11 gun-related homicide-suicides with 22 deaths occurred.[11] If these seven days were representative of an average week, 572 suicides and at least 572 related homicides would be expected over a year. Most homicide-suicides are the spousal/consortial type, but there are multiple victims in 10 percent to 15 percent of cases.[6,12]

Homicide-suicide rates have been consistently reported to range from 0.2–0.3/100,000 persons in most studies,[1,6,13] although a few investigators have reported higher rates of 0.4–0.5 per 100,000.[12,14] All of these epidemiological studies have been based on retrospective analyses of information from medical examiner's and coroner's reports where cause of death was classified using the *International Classification of Diseases (ICD)* external cause of injury codes, or E-codes.[15] Homicide-suicides can only be ascertained by comparing homicide and suicide lists using available information, including date, name, location, and method of death.

Although empirical descriptive epidemiological studies of homicide-suicide are not available for the country, print media surveillance has been used to estimate the number of intentional injuries, including homicide-suicide.[1,16–20] Newspaper accounts are often sources of supplemental information to accompany medical examiner's and coroner's reports, but used alone they vary in the accuracy and type of information provided and underreport intentional injuries.[16,18]

Despite the rarity of these events, recent research has indicated that homicide-suicides, especially among older persons, may be increasing.[2] The lack of a national surveillance system or standardized definition for homicide-suicide may be affecting the low reported rates of this phenomenon. Accurate accounting of homicide-suicides can only be accomplished through the use of a specific *ICD* E-code classification similar to those used for homicide and suicide by the Centers for Disease Control and Prevention (CDC). Recently, the CDC pilot-tested a National Violent Death Reporting System (NVDRS), in which detailed information regarding violent deaths is collected from multiple sources in order to increase surveillance of homicide and suicide in individual states.[19] This surveillance system is being implemented in six states and, if successful,

may also serve to link specific intentional injuries to each other, thus creating surveillance of homicide-suicide events. The implementation of a national surveillance system of homicide-suicides using standardized classification and reporting methods would be a valuable mechanism to identify and prevent this increasingly violent public and mental health problem.

TYPES OF HOMICIDE-SUICIDE

Homicide-suicides often occur suddenly and all parties directly involved are dead. There is little, if any, prior clinical documentation, and often the possibilities for psychiatric intervention are limited.[10] Of the articles published in this area, most are descriptive reports or epidemiological studies that do not empirically document the biopsychosocial complexities of these acts. Most homicide-suicides are perpetrated by men, and most of their victims are female. Cultural differences do exist; for example, most of the homicide-suicides in the United States are perpetrated by men who kill their spouse or lover, while in Japan most homicide-suicide perpetrators are mothers who kill their children and then themselves.[10] Further, in the United States, nearly all (~90%) of all homicide-suicides are committed by non-Latino white perpetrators.

The number of victims associated with homicide-suicide events varies, and depending on the type of homicide-suicide can range from one victim, which is commonly seen in intimate partner homicide-suicides, to two or more victims, frequently seen in familicides or mass murders.

Spousal/Consortial (Intimate Partner) Homicide-Suicide

Homicide-suicide between spouses or lovers represents one-half to three-fourths of all homicide-suicides in the United States,[10] and are typically interpreted as dyadic deaths, double suicides, or homicide-suicides with altruistic motives. Frequently, the spousal homicide-suicide is the culmination of a chaotic, abusive relationship marked by amorous jealousy.[1,10,22–27] Intimate partner homicide-suicides are also frequently associated with a real or threatened dissolution in the partnership, that is, an impending separation or divorce. There is sometimes a history of domestic violence in the couple prior to the homicide-suicide, but not always. The victims are nearly always female and are typically killed at home with a firearm.

Homicide-suicides occurring in older couples or spouses (see Special Topic below) have been typically considered, and often described in the media, as suicide pacts or mercy killings. Recently, it has been determined that homicide-suicides among older adults share similar characteristics with homicide-suicides

in younger couples, although the precipitating stressor in older couples is more likely chronic illness or caregiving rather than impending separation.[5]

Familial Homicide-Suicide

Homicide-suicide events can take several forms other than spousal/consortial, including fillicide and infanticide, which occur when a parent kills his or her child or children and then commits suicide; and familicide, which occurs when a parent kills the entire family and then commits suicide.

Homicide-suicides involving children are most frequently committed by the mother and are discussed in depth in another chapter. In these cases, the mother will almost never kill her spouse along with her children. Conversely, fathers who kill their children and then themselves are more likely to also kill an intimate partner at the time of the event.

An estimated 30 percent of all homicides involving children in the United States each year are committed by a parent.[28] Children are killed by a parent who then subsequently commits suicide for varied reasons: the infant or child may be caught in the middle of an argument between the parents; the child may be killed for revenge against one parent related to divorce or separation; mothers with severe post-partum depression may develop psychotic features and kill their children to "save" them; children may be killed by parents for altruistic reasons. Nearly all cases of homicide-suicide can be related to either an acute or chronic stressor as a predisposing factor to the homicide-suicide event.

Other Homicide-Suicide

Extrafamilial homicide-suicide occurs when an individual kills one or more strangers, usually a group of people, and then commits suicide. Mass murders, including workplace killings, in which the perpetrator kills several persons and then commits suicide are also homicide-suicides.

Special Topic: Homicide-Suicide in Older Adults

Mr. M., age 91, shot his wife, Mrs. M., age 88, while she was sleeping in their bedroom. Mr. M. then dialed 911, stated that there was a homicide-suicide, and hung up. When police arrived, they found Mr. M. lying next to his wife in bed with a gunshot wound to the head. Mr. and Mrs. M. had been married for 71 years. Investigators found several notes, including detailed instructions for their daughters, around the house. Mr. M. had been caring for his increasingly frail wife for many years. Mr. M. had been on more than 10 medications, including antianxiety and antidepressant drugs, at the time of his death.

Mr. B., age 85, shot his wife, Mrs. B., age 83, in their apartment at an assisted living facility. Mr. B. then shot himself. The couple had recently been told that Mrs. B. was going to have to be transferred to a nursing home due to her declining health.

Mr. P., age 67, shot his 65-year-old wife and then shot himself. The couple had a history of marital problems, and the homicide-suicide occurred after a lengthy and heated argument. Mrs. P. had recently sought the advice of a divorce attorney due to the discovery of her husband's illegitimate child.

Mr. S., age 87, shot his wife, age 84, in the parking lot of the nursing home in which Mrs. S. had lived for over a year. Mr. S. wheeled his wife out to the parking lot during his regular daily visit to his wife, who had Alzheimer's disease. Mr. S. had recently been diagnosed with liver cancer. After Mr. S. shot his wife, he then shot himself in the head. Three suicide notes were found, one on his wife's wheelchair.

In the United States, persons age 65 and older have always had a higher suicide rate than other age groups, and the rate has been increasing since 1980.[29–31] Older men have substantially higher rates than older women, committing 70 percent to 80 percent of all suicides.[29,30,32] Suicide rates increase with advancing age, and white men age 85 and above have rates of 60.4 per 100,000, almost six times that of the general population.[31]

Although death rates for suicide in older persons are substantially lower than the rates for heart disease, cancer, and infectious diseases, the number of older persons who die by suicide and homicide-suicide is substantial. The Surgeon General's recent report, *Call to Action to Prevent Suicide*, declared suicide a serious public health problem and specifically targeted the older population for prevention efforts.[33] Suicide took the lives of 8,700 people age 55 and older in the United States in 1997, or 167 individuals each week.[29] Since most homicide-suicides in older people involve couples, at least eight people died of this cause each week of 1997.

Although many papers have been published about homicide-suicide since the first reports by Ferri[34] and Provent,[35] it was not until the late 1990s that the rates and clinical patterns of homicide-suicide were reported in older persons.[2,4–5,20] In the few earlier studies where older perpetrators and victims were even identified, only the number of events was reported or the deaths were attributed to mercy killing.[36–38] These lethal events were erroneously believed to be more common in the young and to be suicide pacts or altruistic homicide-suicides where both spouses were old and sick.[29]

Research findings to date indicate that homicide-suicides in older persons are not suicide pacts and most homicide-suicides are spousal/consortial,[2,5] a finding consistent with other studies[23,38–39]. Motivations behind these homicide-suicides

are complex, with psychopathology, marital and family dynamics, caregiving burden, and other life stressors, as well as other individual, family, and community factors implicated. Homicide-suicides involving older persons are perpetrated by men who are older than their victims, have been to a physician within a few weeks of the event, and use guns as the method of death.[2] These are all factors similar to the observed pattern for suicide in the older population.[29–30]

Chronic physical illness, the single most distinguishing feature of old and young homicide-suicides, impacts mood and destructive behavior. The differential effect of illness and other chronic stressors prevalent in late life on the risk for intentional lethal injury toward self and others remains to be clarified.

PSYCHOPATHOLOGY AND HOMICIDE-SUICIDE

Psychopathology, especially depression, has been consistently linked to the killing of family members as well as other forms of intentional violence, including homicides and suicides.[40–41]

Almost all homicide-suicides occur in a family context, and most involve only one homicide victim, usually a wife or intimate. Homicide-suicides are rare events, but the traumatic stress can have significant and long-lasting effects, including depression and post-traumatic stress syndrome, in family survivors who are covictims of these sudden lethal events.[1, 10, 42]

Palmer and Humphrey[43] first suggested that homicide-suicide is a suicidal process and that perpetrators have characteristics similar to individuals who only commit suicide, but there have been no empirical studies. It has long been known that between 75 percent and 95 percent of individuals who kill themselves have a treatable psychiatric illness,[29,30,32,44] and that psychopathology is also prominent in individuals who commit homicide-suicides.[2,8,10]

The important role of undetected and untreated depression as well as other psychiatric problems in homicide-suicide cannot be overemphasized. Rosenbaum,[8] in a psychological autopsy series of cases, reported that 75 percent of perpetrators of homicide-suicide suffered from depression and 33 percent had an Axis II personality disorder. Personality factors such as low openness to experience on the NEO five-factor inventory[45] have been linked to completed suicide in persons age 50 and older, and other traitlike factors such as aggression, impulsivity, and inflexibility have been related to completed suicide.[46–47] Autopsy reports of homicide-suicide victims reveal that a very low number of perpetrators test positive for antidepressants, and that perpetrators have a low prevalence of previous psychiatric treatment.[4–5]

Alcohol misuse has been associated with both suicide and homicide-suicide.[4,39,48–51] The use of alcohol and other drugs, including benzodiazepines,

among homicide-suicide perpetrators may serve to decrease inhibitions to commit these violent acts.[52–54]

Marital difficulties resulting from caregiving burden, marital conflict, and other circumstances, have been implicated in both homicide-suicide and suicide.[2,29] Marital conflict involving an impending or previous divorce occurs in about a third of couples who die in a homicide-suicide.[1,4,12] Jealousy and conflict are the most common motivations reported for younger couples.[2,22–23,25–26,39] The extent to which prior marital conflict may have been characterized by domestic violence is documented in only a fraction of homicide-suicide cases.

A number of homicide-suicide events can also be characterized by situations where the male perpetrator was a caregiver, including familial cases where adult children caregivers kill their parents. Older men who are caregivers appear to be at risk for homicide-suicide.[2,4–5] Caregiving is a stressful burden, and persons providing care are known to be at risk for depression, a factor known to be related to homicide-suicide, especially in older men.[2,4–5,8,55–57] Physical illness in the perpetrator and victim has also been noted to increase the risk for homicide-suicide.[2,8,58–61]

Special Topic: Diathesis-Stress and Homicide-Suicide

Homicide-suicidal and suicidal behaviors are complex acts determined by many factors that interact over time to lower the threshold for action. Although there are a number of theoretical approaches to suicide,[29] only a few have been proposed for homicide-suicide.[10] A diathesis-stress model has been proposed to explain risk for homicide-suicide.[62]

Homicide-suicides can be described as the result of additive or multiplicative effects of diatheses, that is, vulnerabilities and multiple biopsychosocial and environmental stressors, as well as protective factors. The diathesis-stress model, originally developed to predict schizophrenia[63] has been a useful model for the explanation of depression and hopelessness.[64–67] Diathesis-stress models have also previously been used as theoretical frameworks for the study of lethal behavior.[68,69]

Diatheses for lethal violent injury may include psychopathology, physical health problems, pain and suffering, personality characteristics, attitudes and beliefs, or cognitive attributions. Stressors may include a real or perceived change in health, inability to master the challenges of being a caregiver, pending institutionalization, social isolation, and marital and family conflict. The mechanism through which interpersonal and life stressors influence the vulnerability of older perpetrators to commit homicide-suicide or suicide remains to be clearly specified.[68–69]

Protective factors may include biological, psychological, social, cultural, or environmental influences that serve as buffers or increase the resilience of vul-

nerable individuals.[70] Social support, help from health care professionals and family and friends, support to seek domestic violence protection, or assistance with conflict management and resolution may also be protective for homicidal and suicidal behavior.

SUMMARY

Restricted access to guns may be one of the most potent ways to prevent homicide-suicide and other lethal intentional violence. Almost all homicide-suicides involve guns, and homicide-suicides are rare in countries with strict gun control laws.[6] The risk of a homicide occurring in a home with a gun present is almost twice as high as a non-gun-owning household, while the risk of suicide increases nearly tenfold in homes with guns.[71]

Risk factors, protective factors, and their interactions are the basis of an empirical prevention model for homicide-suicide and suicide.[10,33,47,70] Early intervention to prevent these tragic deaths based on the potential for a homicide-suicide or suicide could save lives. The available data make it clear that substantial efforts are needed to increase the knowledge of primary care physicians, other professionals, and families about the detection and appropriate treatment of depression and marital stress in vulnerable population groups.

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Mothers Who Kill Their Children: Considering Patterns, Prevention, and Intervention

Cheryl L. Meyer and Michelle Oberman

Filicide, or the crime of killing one's children, is as old as human society. Even a brief consideration of written history confirms this. It appears in the Old Testament. It is written into Roman law. Filicide is not new, and yet, because it undermines some of our most cherished myths—that mothers are unfailingly altruistic and that nuclear families are safe, happy, and loving havens—society tends to react to stories of filicide with shock and horror.

The most certain way to prevent filicide is to understand its genesis. When considering contemporary cases of maternal filicide, in particular, a surprisingly clear set of patterns emerges. These patterns reflect specific cultural norms and imperatives, both unwritten and written, that govern practices such as motherhood, family, mental health, and violence in contemporary life.[1] In the discussion that follows, we will explore these norms, illustrating the manner in which they shape contemporary maternal filicide cases, as well as the broader spectrum of child abuse and neglect.

It is impossible to determine the *exact* frequency of modern American infanticide for a number of reasons. For example, the perpetrator may be a juvenile and the records are sealed, or an infant is found dead but the cause of death or the perpetrators are never identified. In 1997, the Federal Bureau of Investigation estimated that nearly five infants under the age of one are killed each week (based on 1995 data), although the agency's report did not specify who committed the crimes.[2] However, children under age one are at a great

risk of homicide and their killers are more likely to be their own mothers than anyone else.[3] Meyer and Oberman's data suggests that a mother murders her child approximately every three days in the United States.[1] This number is derived from the fact that we found over 1,000 reports of maternal filicide in the United States from January 1, 1990, to December 31, 1999, or more than 100 per year, which averages to one murder every three to four days. It is *very* likely that this number is also an underestimate.

We were able to find extensive information on 219 of those 1,000 cases. From them, we created a typology of mothers who kill their children. After publishing that typology, we interviewed 40 women who had been convicted of killing their children and were incarcerated for their actions. Their responses added a qualitative dimension to our original research, and we include some of their stories in the discussion below.

This chapter begins with an overview of our two research methodologies. It proceeds with a comprehensive review of our typology of filicide cases, which incorporates both our qualitative and quantitative research findings for each of the five types of filicide we identify. Following the discussion of the typology, we turn to a consideration of prevention and intervention strategies. In closing, we discuss some interventions and advocacy issues as they relate to the social construction of motherhood.

METHODOLOGIES

Oberman's research provided the impetus for our typology.[3] Using NEXIS, a news database that provides full text articles and publications from news-magazines, regional, and national newspapers, newsletters, trade magazines, and abstracts, Oberman identified 96 reported cases of filicide. Using these cases, the primary researchers for the project and a team of additional researchers read all 96 cases and formulated a draft typology. This draft typology was refined by testing it in classifying new cases, culled from the 10-year span between 1990 and 2000. Although more than 1,000 cases were found, cases that could not be followed up extensively through further searching were deleted from the sample. More details regarding case selection and exclusion are included in Meyer and Oberman.[1]

In order to determine patterns, the researchers tracked available information for each case regarding the following factors: age of the mother, age and gender of child, method of death, marital status, number of children in the family and in the home, geographical location, date of crime, charge/conviction, mother's behavioral response after death, history of domestic violence, mental health history, substance abuse history, socioeconomic status, the need for public assistance, children's protective service involvement, frequency of weapon use, any motive mentioned,

birth order of child. Following publication of the typology and our findings, a second research team was provided with an opportunity to interview mothers incarcerated for killing their children. The women's reformatory with which we worked housed 69 women (out of approximately 1,800 inmates) who were incarcerated for killing their children. Forty of these women participated in a two-hour interview. Of the remaining 29, 13 were unable to be interviewed because they were in prerelease (9), the residential treatment unit (2), lock-up (1), or on judicial release (1). One woman killed her adult son and was not invited to participate. Two women had scheduling difficulties. Only 13 women out of 69 refused to participate. Each interview lasted approximately two hours. The interviews took place in offices within the prison medical facility. Some of the case studies that follow are drawn from this research. Where names and details are part of the public record, we have used them without alteration. When a case study only includes the woman's first name, the name and details of the crime have been changed to protect confidentiality. The quotes are paraphrases from the interviews.

UNDERSTANDING PATTERNS RELATED TO MOTHERS KILLING THEIR CHILDREN: A TYPOLOGY

Our typology was not the first typology related to filicidal parents.[1] However, it is the only typology based exclusively on cases from the United States. Additionally, the cases were all recent, occurring during the 1990s. In creating the typology, we believed that because infanticide has reflected cultural norms and imperatives throughout history, the unique interaction of social, environmental, cultural, and individual variables needed to be addressed *within each category* of filicidal mothers. In that way, we could arrive at as complete a picture as possible of the factors that come together to result in filicide in each case. Patterns and characteristics associated with each of the five types are described below, beginning with a representative case study. The types of filicide are described in descending order, from the most to the least common.

Filicide Due to Neglect

Linda was the victim of physical and sexual abuse at the hands of her uncle from age 2 to age 11. At the age of 13, she was raped by another man. As an adolescent, she received some counseling because she was acting out in school, but Linda doesn't feel this was very helpful for her. At the age of 18, she became pregnant as a result of a relationship with a man she eventually married. They had another child together. However, Linda describes the relationship as troubled. They eventually divorced and Linda moved into her own apartment

in the same neighborhood. Her ex-husband began stalking her and making threatening phone calls to her. She was forced to move to a different town in order to get away from him. The apartment into which she moved was where the incident occurred in which both of her children were killed.

Linda had been living at the new apartment for over a year and had begun dating a young man who lived in a nearby house. On the evening of the incident, Linda put her two children down to bed and decided to go visit her new boyfriend, ostensibly for just a short time. She left her apartment, leaving a space heater on in the master bedroom where her children were asleep. While she was gone, the space heater somehow caught the bedding on fire and both children died. Linda was charged with two counts of involuntary manslaughter and received a prison term of 10 years.

Linda talks about her circumstances in the following excerpt:

A lot of people here call me "baby-killer" and it bothers me. People say I'm a violent killer. It's not that I purposefully did anything to them . . . I am not a violent person. When they call me baby-killer, it is really painful. I don't think I killed my children . . . it's hard to deal with being in here . . . and it's hard to understand how my family can stick by me . . . because I have a lot of guilt and I started hating myself and I am thinking, "how can they not hate me?"

This category of cases is marked by several strikingly consistent patterns. The mothers in these cases generally had more than one child, and the events that led to the death of one of her children are most readily viewed as accidental. Rather than intending to kill their child, these women emerge as mothers who were attempting to care for their children under conditions that were suboptimal, at best. These mothers overwhelmingly received little or no support from the fathers of their children. They had limited financial means. Their living conditions tended to be tenuous, and their support systems were fragile and seldom extended to child care. All of these factors limited the mother's ability to find work to support herself and her children, as well as to find ways to provide herself with the sort of respite care that all mothers, and particularly single mothers, need.

In our original study, we had a total of 76 cases of neglect. The majority of these women became mothers between the ages of 17 and 20 years. In addition, the overwhelming majority (85%) of mothers in this category were single parents, which likely further compounded their economic situation and available resources. Moreover, among the cases reviewed, 41 percent of the families had three or more children. Not surprisingly, 90 percent of the cases in this category involved mothers living in poverty. Finally, in at least 41 percent of

the cases there were mental health issues, including mood disorders, such as depression, or chemical dependency.

We subdivided cases in this category into neglect-omission and neglect-commission cases, respectively. Neglect-omission cases included instances where the mother did not attend to health, nutrition or safety needs of the child, often by not providing adequate supervision. There were six predominant ways children died: fire, automobile suffocation, bathtub drowning, layover suffocation, poor nutrition, or inattention to safety needs. In neglect-commission cases, an irresponsible action of the mother caused the death, such as shaking the baby too hard or placing something over the child's head to stop the child from crying. In all cases, the mother did not purposely kill the child.

Neglect-related filicide is not only the most common form of maternal filicide in contemporary society, it is also one of the most entrenched. The challenge when articulating ways in which one might intervene or prevent neglect-related filicide is that one immediately comes up against seemingly immovable forces: poverty, social isolation, and limited access to resources such as child care, job training, and support systems. In a sense, one might view these cases as situational in nature, rather than involving individual psychopathology. Prevention therefore would involve forging connections—whether through neighborhood communities, work, or perhaps places of worship—that would serve to support both the mother and her children.

Filicide Related to an Ignored Pregnancy

Rebecca Hopfer played flute in the high school marching band and spent a lot of time at home. When she was 17, a boy convinced her to have sexual intercourse and then promptly broke off the relationship. In January 1994, Rebecca Hopfer realized she was pregnant, but she concealed the pregnancy. She later told her mother she concealed the pregnancy from her because she loved her too much to tell her. In August, after she had worked all day at an ice cream social, she went into labor at home and gave birth over a toilet. Hopfer maintains the baby was born dead with the umbilical cord wrapped tightly around her neck. The baby weighed four pounds and was 21 inches long. Hopfer wrapped the child's body in plastic bags and put it in the trash. Although she was 17, Hopfer was bound over to adult court and found guilty of murder and abuse of a corpse. She was sentenced to 15 years to life. She failed in two bids for clemency but eventually, in 2004, her sentence was commuted by the governor of Ohio and she was paroled after serving approximately eight years in prison.

Rebecca Hopfer's story helps to highlight perhaps the most strikingly patterned set of cases that we identified in our research: neonaticide. *Neonaticide*

was a term first coined by Resnick,[4] to refer to the killing of a newborn within 24 hours of birth. Thirty-seven women in our sample of 219 (approximately 17%) had committed neonaticide. They ranged in age from 15 to 39, but the average age was 19.3. Thirty-six out of 37 of the women in our sample were single. Several of the intimate relationships that produced the pregnancy ended when the future father found out about the pregnancy. More than a third of the women gave birth in their bathrooms at home. In 70 percent of the cases, the child died from being smothered.

These cases were marked by an extreme degree of emotional isolation and fear. The women who committed neonaticide were relatively young and often socially immature. Their pregnancies were, for the most part, accidental, and yet, most of the women were ambivalent about the thought of ending their pregnancies. On the one hand, some feared that the birth of their child would bring about the demise of their life as they knew it. On the other hand, some hoped that the child might be a source of love and affection in their otherwise emotionally isolated existences.

The fears triggered by the pregnancy tended to be both practical and emotional. Most of these women felt their families would not be supportive during their pregnancies, let alone in their lives as mothers. In particular, they expressed fears that they might be ostracized or even physically punished. In general, they were overwhelmed by feelings of shame, guilt, and/or fear. Because they were relatively young, many of these women feared they would be kicked out of their homes, and they worried about how they would support themselves and their baby. Due to these fears, some of these girls and women, like Rebecca, actively concealed their pregnancy. One woman we interviewed, who had concealed her pregnancy and then committed neonaticide, described her experiences as follows:

> I hid the pregnancy from everyone . . . that was the hardest part—ignoring my pregnancy. It was so hard to deny and hide knowing that there is a life inside you. I had no medical care . . . I didn't even see a doctor. I kept thinking, 'it can't be true . . . this isn't happening to you'. Several times I wanted to talk with my family but I was too scared . . . several times I wanted to sit down and tell them but I thought 'they'll think less of you or that it was your fault'. It was not that way at all. Now they tell me: you should have come to us and we would have helped you any way we could . . . It's hard being in here [prison] knowing that I am convicted of killing my child—the hardest thing is knowing that I am convicted of killing my child. People turn up their nose up at you and treat you differently. Some don't care and treat you human but a lot don't. I don't even talk to people about my case. I just want to be treated like a human. We are all here and we all made mistakes.

Other women denied the pregnancy, even to themselves. Some were able to deny the pregnancy because they continued to menstruate and gained minimal

weight. When they began to experience the abdominal cramps and indigestion that often comes with labor, many thought they needed to defecate. Given their lack of prenatal education, this confusion is not surprising.

For all of their fears, however, at least some of these women reported wanting a baby, viewing it as a potential source of unconditional love and attention. It is important to note that these women were, in many cases, still girls, living at home with their parents. Although their families of origin might appear to have been loving ones, it must be noted that these girls felt unable to confide in *any* of the adults in their lives. Moreover, the adults either did not notice the girl's advancing pregnancy, her emotional state, or the broad hints that the girls dropped in their effort to get an adult to intervene and take care of them, or they chose to deny them, just as the girl was denying her pregnancy. As a result, the girls were left alone with their desperate secrets. In such circumstances, it is not surprising that an adolescent might have some positive fantasies about the sort of love, affection and attention that a baby would bring to her life.

In hindsight, one might identify multiple opportunities for prevention in these cases. A surprising number of these girls were seen by doctors or nurses during the course of their pregnancies—some for school-related care, and some even for routine gynecological exams. Unfortunately, the health care providers typically failed to ask direct questions relating to the girl's health, or to probe a bit when met with the girl's silence. In some cases, they allowed the girl's mother to remain in the examination room, which chilled the girl's willingness to confide in her health care provider.

An additional opportunity for prevention might have involved any of the numerous unrelated adults who were present in these girls' lives, and who might have had reason to recognize her pregnancy. In almost all cases, there were teachers, coaches, youth group leaders, religious leaders, friends, and friends' parents who either missed the signs of pregnancy, or perhaps suspected it but hesitated to intervene. Adolescents in our society often are remarkably isolated from adults, who view them with some degree of fear or alienation. This isolation leaves them vulnerable when attempting to exercise responsible decision-making in "adult" situations. These girls, and their babies, might well have been rescued had even one of the adults in these girls' lives shown concern, rather than disinterest or fear.

Recently states have been enacting "safe haven" laws in an attempt to prevent neonaticide and newborn abandonment. Although well intentioned, "safe havens" have had little, if any, impact on the number of neonaticides to date. This may be due to the fact that there is some element of planning involved in dropping a child off at a "safe haven," and that the girls and women who commit neonaticide are so emotionally paralyzed that they are perhaps

uniquely unlikely to engage in such advance planning. Nonetheless, if fully implemented, these laws may raise awareness about unwanted, concealed pregnancy. Indeed, were a teacher to be assigned to educate young people about these laws, this might have the secondary benefit of revealing a safe adult in whom a girl might confide.

Purposeful Filicide and the Mother Acted Alone

Beth was an extremely withdrawn and shy child who grew into a quiet and rebellious adolescent. At 15, she met a very charismatic 29-year-old man named Bob. Within a year she was pregnant, and she had given birth to four children by the time she was 20. Bob had a job in sales and traveled extensively, taking his family with him. This forced Beth to drop out of high school. Beth felt isolated and alone most of the time. Bob had numerous affairs and was an alcoholic who could be extremely violent when he was drinking. When she was 21, Beth left Bob and returned home. She brought her four children with her, all of whom were under the age of six. They lived in her parents' partially finished attic. The conditions were less than ideal: there were no windows and the temperature would average 88 degrees during the day and 74 degrees in the evening. Still, Beth held a part-time job to support her family and completed her high school degree.

One evening at a party, Beth went for a walk with an acquaintance and was brutally raped. In response to this crisis, on top of her chronic exhaustion and depression, Beth determined that she no long could bear living. However, she did not want to leave her children behind. She stated, Beth started with the youngest child and one by one smothered each child. She then ingested 40 over-the-counter sleeping pills. Beth survived and was sentenced to life in prison without parole. As she looks back on her crime she states:

> I don't consider it over. As long as I live I don't consider it over . . . I will live with the pain of killing my children the rest of my life . . . Before I committed the crime, I didn't like any of me anymore. I didn't feel I could be a good person for many years. I didn't accept I could have a life after killing my children . . . Once I reached the point where I felt responsible, I stopped having nightmares about my kids. I had good dreams, of us doing things together.

At many levels, the purposeful filicide cases, in which a mother deliberately takes the life of her child or children, are the most difficult to comprehend. Perhaps because of this, in some sense, they seem to be the most intriguing. Mental health problems are woven through the overwhelming majority of the cases in this category, and yet, there is a remarkably broad spectrum of diagnoses relevant to these cases. At one end of the spectrum are cases like Beth's, in which there was no history of treatment for mental illness, and yet, clearly

the rape was a trauma that likely awakened and exacerbated anxiety Beth had experienced through domestic violence. In addition, long before the rape that precipitated her homicidal acts, she was clearly exhibiting signs of depression.

At the other end of the spectrum are cases such as that of Andrea Yates, the Texas mother who drowned her five children in a widely reported case in 2001. Yates had a long history of struggles with mental illness, including numerous hospitalizations for postpartum mental illness. At the time of her crimes, she was in the throes of postpartum psychosis.

Other cases in this category are somewhere between these two extremes. Consider the equally notorious case of Susan Smith, a South Carolina mother who killed her two small children by leaving them in the car and rolling the car into a lake. Although she had a long history of struggles with mental illness, suicide attempts, and ongoing sexual abuse by her stepfather, Smith was not under medical supervision at the time of her crime.

Conventional wisdom suggests women in this category are either "mad or bad." Women portrayed as "mad" have been characterized as "good mothers" who have conformed to traditional gender roles and whose crimes seem to be the result of mental illness. In contrast, women characterized as "bad" do not seem to suffer from mental illness and are labeled as cold, callous, evil mothers who have often been neglectful of their children or their domestic responsibilities. This dichotomy can be seen in portrayals of Andrea Yates. The prosecutor suggested Yates was "bad," in that she purposely and selfishly killed her children. Yates's defense claimed the opposite—that she was "mad" and the deaths were the result of mental illness. This simplistic dichotomy cannot begin to address the complexities underlying these cases.

Despite the diversity these cases presented in terms of maternal mental illness, striking and clear patterns emerged among the 79 cases we reviewed. These commonalities include the killing of multiple children, the experience of a recent failed relationship, the extent to which these mothers felt desperate and suicidal, and finally, issues of cultural and religious ideology.

Unlike mothers in other categories, nearly 39 percent of mothers within this category killed more than one child; when considering only cases of murder-suicide, the number jumped to 68 percent. In addition, the majority of the mothers in this category (57%) attempted to kill not only their children, but also themselves. Almost 42 percent of the mothers in this category experienced a recent failed relationship, separation, or divorce prior to the murders. This number increases if the experiences are expanded to include the death of a loved one. For example, Andrea Yates lost her father shortly before killing her five children.

Of these fact patterns, the suicide attempt by the mother is perhaps the most salient. The criminal justice system often diminishes or ignores these attempts,

yet those seeking to understand and prevent these crimes must pay attention to the fact that it is the mother's determination that she can no longer go on living that typically leads her to take the lives of her children. A surprising number of these mothers sought to arrange alternative care for their children, asking parents, siblings, or friends whether they would be willing to take responsibility for them in the event that something happened to her. Only after such attempts failed did they decide to "take their children with them." Often, this decision was rendered more acceptable to the mothers because of deeply held religious convictions regarding guilt, forgiveness, and an afterlife.

Another distinctive feature of these women's stories was their devotion toward their children. For instance, Beth describes herself as having been a loving mother and devoted to her children:

> They always came first. They were more of an appendage. I loved them very much. Killing them was not out of hate. It was a suicide. I could never envision them without me. I could not accept that my ex-husband could raise them better than me. I wanted to die and I wanted the kids with me in death. Everything I valued was my kids and if I had them with me in death then there was nothing holding me back and the thought that I could kill them—I was totally worthless and once I started thinking that and felt that way about myself I couldn't stop myself.

The overwhelming majority of these mothers had no history of abuse or neglect toward their children, and most people who knew them agreed they exhibited undying love for their children.

Finally, issues of culture and ethnicity seem to play a significant role within this category, particularly as they relate to immigrant women. A large number of immigrant women were represented, in comparison to the other categories of filicide. Many of these women were reported to have had difficulty assimilating to life in the United States.

Although postpartum mental illness receives a considerable amount of attention in the popular and professional literature, a relatively small percentage of mothers within this category suffered from postpartum disorders (8%). Overall, when all 219 cases are included, the postpartum cases accounted for less than 3 percent of the sample. Certainly, it is possible that some of the women may have suffered from postpartum depression or psychosis without being diagnosed or even identifying it themselves. However, in applying this standard to the sample of 40 incarcerated women whom we interviewed, 10 women killed their child in the postpartum period (defined as one year postpartum) and only 6 of the cases might arguably have involved postpartum disorders. Of those six, only one woman attempted to raise a postpartum illness-related defense at trial.

Nonetheless, a significant number of women in this category recognized their need for mental health treatment and sought care. Unfortunately, those who did seek help, or were referred for treatment, often were not candid with their health care providers about their distress, and in particular about their fears or plans. For example, they usually did not discuss their fears of being a bad mother or their thoughts of committing filicide. In part, this may stem from embarrassment or shame about not being a good mother. Such reticence may also be due to real fears of losing custody of their children were the mothers to reveal their darkest thoughts. Thus, their health care providers failed to recognize the immediate threat that these women posed to their children and to themselves. Those who wish to work toward the prevention of filicide should anticipate these fears and concerns when treating mothers for mental health problems, and must create an environment that feels safe enough for the mothers to disclose the true nature of their distress.

Abuse-Related Filicide

Felicia was incarcerated in her early 20s for involuntary manslaughter and child endangerment. She was sentenced to up to 25 years for fatally beating her four-year-old child. Felicia readily admitted that she had a history of abusing her daughter and that Felicia herself was the victim of extensive and severe physical and psychological abuse and neglect by her stepfather. She also observed incessant violence against her mother by her stepfather, which, she noted, led to her mother abusing drugs heavily. In addition to abuse she experienced and witnessed at home, Felicia was later assaulted by her baby's father, who beat and raped her. This rape resulted in the conception of her daughter.

Felicia has spent much of her time in prison thinking about why she hurt her daughter and has finally concluded that she learned her behaviors from her parents' modeling. She states:

> My mother and stepfather are both recovering addicts. The abuse came at the hand of my stepfather. I recall my stepfather hitting me . . . and he also hit my mother. He threatened me with a knife several times if I didn't do exactly what he said. I tried to commit suicide three times when I was a kid. I was tired of being hit on—you know what I mean?

In most respects, Felicia is representative of mothers who killed their children through abuse. Mothers who abuse their children or who kill their children through abuse have not received much research attention. In part, this may be due to definitional issues. Abuse and neglect are not clearly distinguished, and there are ethnic and cultural variations in what constitutes acceptable discipline practices and what is abusive.

In our original research we had only 15 cases in this category, and there was very little information available on 3 of those cases. The children killed ranged in age from six weeks to six years. However, only two were under a year old. The women had an average of four children, but 10 of the women had four or more children. All of the children but one, who drowned, died as a result of beatings. Almost half of the fatal assaults involved a blow to the head. Although the mothers seemed to abuse all their children, several cases mentioned that the victim seemed to be a target of violence more often than the other children. We found similar patterns in our interviews with women who killed their children through abuse.

One of the most troubling aspects of this particular form of filicide was that, in the vast majority of cases, state child welfare authorities were aware of the trouble in these families long before the child was killed. In our original sample, child protective services had previously intervened with at least 12, and possibly even 14 of the 15 cases. In two-thirds of the cases, the mother had previously lost custody and killed the child after reunification. Although it was unclear how long the mother and child had been reunited, in at least five cases it had been less than six months. Of the five cases that were not reunifications, three of the mothers had previously been reported to child welfare.

In addition, child protective service workers were involved with most of our interviewees who killed through abuse. However, the fear of seeking help because children's services might remove children from the home was a theme in all our interviews. One woman stated, "I think maybe when people come to ask for help instead of penalizing them—that's probably what my husband was afraid of—they should provide resources. If a person goes and tells them, 'I'm on the edge,' they take the chance of having their kids taken away from them." As a result, the involvement of children's protective services did not seem to prevent abuse-related deaths.

Although none of the mothers in the abuse-related category of our original research was an adolescent at the time of the crime, many were adolescents when they first bore a child. The average age was 27 with a range of 21–39 years old. Substance use was clearly a factor in eight of the cases and at least a third of the victims had been born addicted to substances. At least two of the women were pregnant at the time of the killings.

When we were able to interview the women who had killed their children through abuse, we determined that most of these women reported being abused as a child. The *intergenerational transmission hypothesis*[5] suggests that being abused as a child, or observing abuse as a child, is related to prepetrating abuse as a parent. Some of the women we interviewed had come to understand their predisposition. For example, Felicia stated:

> When I finally saw a counselor, she told me about the cycle of abuse and the "generational curse." She really helped me to understand myself. In my

case, my daughter was just doing something she knew she wasn't supposed to do . . . I never had any patience and I slapped her real hard in the face. She fell, hitting the corner of the wall and she died two days later in the hospital.

Most of the women we interviewed did not understand the cycle of violence in which they had unwittingly participated. The women often said something to the effect of, "I had an Ozzie and Harriet childhood. I was sexually abused for a few years but beyond that we were a typical family." Their descriptions reflected a sense that the abuse they had experienced was a relatively unremarkable part of growing up, and they were simply noting it for the record.

The perception that abuse is typical is all the more troubling in light of the fact that it is a common theme in at least three of our filicide categories: abuse-related, assisted/coerced, and neglect. Perhaps the best hope of preventing filicide cases that grow out of chronic abuse and/or neglect is to heighten awareness regarding the patterned nature of child abuse and the support that is needed to assist those who survive abusive childhoods when they themselves undertake parenting. For instance, Felicia long had been involved with children's services and had undergone court-ordered counseling, yet until she was incarcerated, no one had ever explained the intergenerational transmission hypothesis to her, nor described the way in which her own abuse as a child might have shaped her responses to parenting. Felicia told us, "I feel like the system failed me until I saw the psychologist who told me about the cycle of abuse . . . My whole thing is to get to the core of it and try to prevent it. I feel like in my situation had that been done, I wouldn't be here."

Assisted/Coerced Filicide

Lisa never knew her father and her mother worked as an erotic dancer. When Lisa was 18 she became pregnant, and the father of the child left Lisa with her new daughter, Angie. Lisa admits she did not know how to raise a family and was struggling to make ends meet. Several times, state child welfare agents came to her home to investigate reports of child neglect. When she met Matt, everyone encouraged her to get married to him because he would be her "knight in shining armor." What Lisa did not know was that Matt was on medication to control his manic-depression and he would stop taking his medication periodically and attempt self-medication. Matt began to discipline Angie in relatively innocuous ways. However, by the time Angie was five, Matt began beating her and administering harsh punishments. One day, Matt beat Angie severely, but Lisa did not think that Angie required medical attention. The child died of internal injuries that night. Matt and Lisa were both convicted of involuntary manslaughter.

In assisted/coerced filicide cases, mothers kill their children while acting in conjunction with a partner—generally a romantic partner—who contributes in some manner to the death. We subdivided our original 12 cases in this category into two subcategories: active and passive. In the active subcategory, the women were directly involved in their children's death. In the passive subcategory, women like Lisa were charged with their child's death due to their failure to protect the child.

The characteristics of women in this category are unlike those of women in other filicide categories. Most notably, unlike most of the other types of filicide, during the time period in which they kill their children, these women are involved with a partner, one who usually is not the biological parent of the child who is killed. The relationship with her partner typically is quite violent in nature. In most cases, state child protection agencies have been involved with the family. As Lisa indicated,

> Domestic violence was not new to me but it doesn't start with someone dying. There's a gradual escalation of violence. I knew that and I was going to stop the relationship with Matt, but I was afraid that since they [the state child protective services workers] saw him as such a hero, they would take my kid away again if I left him.

All of the children in this category who were in our original sample had been physically abused. For the most part, the deaths of these children resulted from discipline-related abuse that escalated into fatal beatings. These incidents occurred during times that are typically stressful for parents, such as bedtime.

When thinking about prevention, it is vital to recognize that state child welfare agencies were aware of the risks facing the families in these cases long before the children were killed. The prevention problem therefore is less one of detection, than it is one of discernment. How is the state to distinguish households in which the children are safe from those in which the children are so vulnerable that they should not be permitted to remain with their mothers? Surely, it is important to note the range of social stressors in these mothers' lives, including poverty and the presence of multiple children in the home. In addition, there is the presence of domestic violence, which brings with it the possibility that the mother might perceive her own exit options as limited. Finally, there is the fact that the men in these cases seldom are the biological fathers of the victims. In and of itself, this is not a warning sign, as few stepparents kill their stepchildren. However, when considered in conjunction with other factors, this may be part of a risk pattern.

FILICIDE AND THE SOCIAL CONSTRUCTION OF MOTHERHOOD

In this chapter we have provided an overview of five different types of mothers who kill their children. Within each category, we have provided some suggestions for ways in which these particular forms of filicide might be prevented. In addition to these case- and category-specific observations, there is one overarching theme, present to some degree in all forms of filicide, that we believe is vital to understanding the persistence of filicide in contemporary society. Specifically, filicide cases result in part from the manner in which society has defined and constructed the role of mother.

The social construction of motherhood has two central and interrelated components. First of all, mothers are held accountable to their children, and are defined by their role as mother, in a manner that is far more comprehensive than is true for fathers. Second, and particularly in the United States, mothers today parent in relative isolation, far removed from the social supports that are present for mothers in other cultures, and throughout history.

With regard to the accountability of mothers, it goes almost without saying that societal expectations for mothers are different than expectations for fathers. A small example: our research failed to identify a single "failure to protect" case in which a father faced homicide charges for his failure to stop his wife or girlfriend from harming their child. Indeed, in the many, many cases we found discussing filicide, there is not a single mention of the fact that the fathers failed to protect their children from the mothers. And yet, the law is replete with such cases brought against mothers. We take for granted the assumption that it is a mother's job to protect her children, and that a mother who is remiss in this duty is, by definition, a bad mother.

The social construction of mother as one who is all-seeing, altruistic, and endlessly loving contributes to filicide in a variety of ways. It makes it risky to share fears and self-doubt with others, for instance. Not surprisingly, a mother's feelings of fear and self-doubt often are aggravated by the social expectation that she should be feeling unadulterated joy about being a mother. Instead of reaching out for help, a mother who is struggling frequently will withdraw from friends and family, hoping to hide the "fact" that she is a "bad mom" from others.

In fact, our research revealed that isolation was a warning sign across all categories, from the teens who conceal their pregnancies and later commit neonaticide to the mothers who experience postpartum mental illness. Although isolation may be self-imposed in some women's circumstances, such as in the case of neonaticide, or imposed by others in different circumstances, such as in

the case of domestic violence, the end result was the same—the mothers felt unable to confide in others about their increasingly desperate struggle.

One of the most frequent comments we heard in our interviews of mothers was that the one thing they had learned in prison was to reach out for help when they needed it, despite the fear and shame that kept them from doing so before. While saying this, they also recognized the very real danger in reaching out. For a mother to admit that she needs help, or that she feels unsure about how to raise her child, creates the very real risk she may thereby invite the scrutiny of state child protective services workers into her life, and ultimately, that she may lose custody of her children. This creates a catch-22: a mother can reach out and put herself at risk, or remain isolated and therefore at risk. Once again, the social construction of motherhood helps to shape this risk. Fathers who reach out for help may not suffer the same scrutiny. Consider the response when a father is widowed versus when a mother is widowed. When a father is left to raise children alone there is an outpouring of parenting support we rarely see for mothers in the same circumstances.

Isolation, the second component of the social construction of motherhood, plays an equally central role in contributing to contemporary cases of filicide. The demise of the extended family, and indeed, of the nuclear family, means that mothers today experience a profound degree of isolation from support systems. In the past, and in other cultures around the world today, a new mother receives substantial support from her own mother, from her siblings, her extended family, and indeed, her entire community. With others who will shop, clean, cook, and care for her and her family, the mother of a young child is free to devote her attention to her baby or babies. In contemporary U.S. society, even a relatively wealthy mother is likely to spend long hours alone with her child, apart from her spouse, isolated from her neighbors, and away from her family.

Isolation is particularly menacing when one considers the needs of mothers who are struggling with mental illness, dire poverty, substance abuse, and/or domestic violence. The mere fact of becoming a mother does not automatically endow one with the coping skills needed to respond patiently and gently to the demands of a young child. Together, the isolation of mothers and the shame that mothers feel if they are less than "perfect" create an environment in which harm to a child becomes predictable, if not inevitable.

CONCLUSION: THOUGHTS ON INTERVENTION AND PREVENTION OF FILICIDE

The researchers involved in both of these projects approached the topic with varying levels of sympathy and horror. By the end of these projects what was striking to us was how our sympathy toward the women had grown and the

horror had become redirected. It started as horror toward the women for their heinous acts. By the end it was a different horror, borne of our recognition that these women were not monsters. In fact, there were many similarities between them and us. It made us aware of our privilege and thankful for our resources. While none of us in any way wanted to absolve these women of their responsibility for their crimes, we wondered whether, given the right circumstances, almost any mother would be capable of such acts.

The disturbing observation that, *on the whole*, we could empathize with many of these mothers derived from our recognition of the challenges inherent in the circumstances under which they were attempting to parent. Isolation, poverty, violence, and mental illness are a terrible foundation upon which to raise a family. In the last paragraph of our 2001 book, we stated, "If there is one central point to this book, it is this: to the extent that we conceive of the crime of infanticide as a rare and exceptional act committed by a deranged or evil woman, we are dangerously wrong" (p. 177).[1] This sentiment was reiterated in numerous interviews. One mother stated:

> People have to stop thinking we are cruel and hard, we just went through an emotional battle. I've had girls tell me that they went through what I went through but they had their husbands and mothers to help them through it. The family has to get involved. People are so closed they don't want to see anything. They see everything in black and white but they really need to see color.

Nothing in this chapter is meant to excuse these mothers or to justify their acts. It is a crime to kill a child, and those who do so should be held responsible for their actions. What is particularly challenging about these cases is the attempt to discern the extent to which these mothers are culpable or blameworthy. By asking questions about their blameworthiness, we increase our understanding of these mothers and the circumstances that surrounded them at the time that they took their children's lives. From this inquiry, we learn that filicide is not incomprehensible. Instead, filicide occurs at the intersection of isolation and despair. It is only in this understanding that we can find the road to preventing what all of us hope will one day be truly incomprehensible: the death of a child at her mother's hands.

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When the Peer Group Becomes the Parent: Social and Developmental Issues Associated with Youth Gangs

Michael Axelman and Sara Bonnell

While youth gangs have been part of the urban landscape for over a century, the number of cities and counties experiencing youth gang problems increased substantially between the mid-1980s and mid-1990s. While the overall level of gang activity appears to have stabilized over the past decade, gang members, according to studies based on large urban samples, are responsible for a large proportion of violent offenses.

Along with impacting society, gang involvement exerts an extremely heavy toll on youth's psychosocial development. Early risk factors associated with gang involvement include: lack of paternal involvement, problematic parent-child relations, low school attachment and achievement, association with peers who engage in delinquency, and disorganized neighborhoods characterized by high unemployment, a factor always correlated with large numbers of youth in trouble. The possible developmental consequences of youth gang involvement can be quite profound and include: reduced access to prosocial goals, school dropout, early parenthood, and unstable employment.

This chapter situates what has been referred to as the youth gang problem within historical, sociocultural and developmental contexts. The fist section presents youth gangs from a historical perspective. This is followed

by a discussion of the way in which gangs impact society, and how social and cultural forces influence youth who are at risk for gang involvement. In order to understand the thoughts and the behavior of youth who have been socialized by youth gangs—behavior which is often misrepresented and poorly understood by the popular media—we must first understand how these youth construct and make meaning of the world in which they live. The lives of these youth are embedded, to a large extant, in a different social system and a unique set of constraints that are significantly different, especially with respect to safety and opportunity, from mainstream American culture. Although the psychological, the social, and the cultural are often discussed independently in this paper, these domains should be understood as interdependent. Gang violence and intimidation are understood as both a response to, and a re-creation of, the economic and social disorganization that characterizes many inner cities and impoverished rural communities in America.

The chapter concludes with an examination of current efforts to address youth gang issues. This includes a review of the several of the more effective community-wide interventions that have been used to address the youth gang problem. Strategies that employ local resources, provide opportunities for education and job training, and engage in collaborative problem solving have been found to be particularly effective.

HISTORY OF GANGS IN AMERICA

From the often romanticized days of Al Capone to contemporary street gangs, urban America has a long history of youth gangs. Youth gangs first emerged in large northeastern cities in the United States among ethnic European immigrants during the industrial era. Outside of the large cities, gangs developed rural pockets in the Southwest following the Mexican Revolution. It is generally agreed that gang growth and activity developed at four distinct periods in the United States: the late 1800s, the 1920s, the 1960s, and the 1990s.[1]

Street gangs first emerged in the United States in the 1800s. As the Industrial Revolution gained momentum, immigrant minorities such as the Jewish and Irish formed gangs in urban centers like New York and Philadelphia.[2] Gangs formed as a response to social conditions such as prejudice and poverty.[3] Mexicans residing in the southwestern United States simultaneously emerged from similar conditions, possibly as a result of the Mexican Revolution of 1813.[4]

During the 1920s and 1930s, youth gangs had a notable presence in lower-income neighborhoods in cities such as New York and Chicago.[5] In Los Angeles, African American gangs began to form in the 1940s, as protective mechanisms

against white clubs. However, it was not until the 1960s that the Los Angeles Police Department began identifying these groups as gangs. Some of these very same gangs participated in the Watts Rebellion of 1965. Some street gangs evolved into political or radical movements, while others continued as street gangs.[6] In the 1930s and 1940s, Mexican American gangs gained momentum, again as a response to social and economic conditions. A distinctive clothing style often marked gangs of this era. For example, the Pacheco fashion and the zoot suit differentiated Latino gang members from other groups. Street gangs continued to evolve throughout the 20th century, as harassment of and poor economic conditions continued for minority populations.[7]

The historical shift to today's multiracial gang membership reflects the changing face of the inner city. Gangs, as we know them today, transformed during the crack cocaine epidemic of the 1980s. This mobilization of gang culture was centered in poor, minority inner-city communities. The failure of the civil rights movement outside of southern cities resulted in little progress advancing economic opportunity for minority communities in northern and western cities. The loss of large numbers of blue-collar jobs in large cities in the North and Midwest throughout the 1980s contributed significantly to the disenfranchisement of young adult males in the inner city.[8] The infamous public housing projects of the 1960s and 1970s, proposed as the solution to housing America's poor, further concentrated poverty in the inner city.

YOUTH GANGS—AN INTRODUCTION

Considerable disagreement exists regarding the nature and definition of youth gangs. A gang is broadly defined by the National Youth Violence Prevention Resource Center as a group of teens and young adults that hang out together and are involved in joint delinquent activity. This definition can potentially encompass small groups hanging out in the local shopping mall as well as adult criminal organizations. Our society tends to see gang members as "super predators" when in fact, the majority of these youths carry on a lifestyle similar to that of their peers—sleeping, going to school, and hanging out with friends.[9] The group will have a name and a common name or symbol, and they often choose to wear a certain type of clothing or to display some other identifying item. While gang members range from age 12 to 24, roughly half of members are 18 or older.[10]

Traditionally, women have been a branch of male gangs or as part of a sexually mixed gang. Currently, there is a rise in autonomous female gangs.[11] In a 1992 nationwide survey, only 3.7 percent of gang members were female.[12] It is important to note, however, that a large portion of those surveyed do not identify any females as gang members. Female gangs appear to be less likely

to engage in violent behavior than their male counterparts.[13] As Puerto Rican gangs such as the Latin Kings were evolving in the latter half of the twentieth century, a female counterpart, the Latin Queens, became the social counterpart of male-dominated gang life. As a large number of gang-associated Latinos were sent to prison, females visiting these incarcerated members received new status as the link between prison and street gang members.[14]

Gangs range across ethnicity and gender and exist in both rural and urban areas. In 2002, the National Youth Gang Survey found that 731,500 members were active in 2,300 American cities.[15] The contemporary ethnic makeup of gangs is primarily Latino and African American. In the 1998 survey, gang members were 46 percent Latino, 34 percent African American, 12 percent Caucasian, and 6 percent Asian.[16]

Latin gangs have increased steadily in recent years. In the 1950s, many violent, often gang-affiliated Latino males from southern California were incarcerated. For protection against the non-Latino inmates and prison staff, the gang La Eme, or Mexican Mafia, was formed. As the number of Latino gang members from northern California grew, the gang Nuestra Familia was formed for the protection of incarcerated gang members. These prison-affiliated gangs manifested as street gangs known as the Surenos (Southerners) and Nortenos (Northerners). La Eme and Sureno gang members identified with the number 13 (the order of M in the alphabet) and the color blue. The gangs Nuestra Familia and Nortenos identified with the number 14 (letter N in the alphabet) and the color red. These gangs were, and continue to be, strongly connected to illegal drug trafficking. In addition to violent street and prison gangs such as the Nortenos and Surenos, there were less violent street groups known as Tagger Crews, named for their acts of vandalism. Initially engaged in nonviolent delinquent behavior, Tagger Crews became incorporated into traditional gang life in Latino California as a way of marking territory.[17]

YOUTH GANGS: IMPACT ON SOCIETY

Currently, gang activity remains an unchecked, unmeasured "hidden war" in our society.[18] Gangs that have traditionally operated in Los Angeles and Chicago have spread throughout America's urban environment. Additionally, deportation of undocumented gang members to countries such as El Salvador has resulted in an internationalizing of gangs to urban cities in other countries. Current gang culture varies from relatively structured criminal organizations to small, local hate groups. While some youth gangs are involved in drug trafficking, other street gangs are involved in other types of delinquent behavior. Modern drug gangs have become organized around economic, hierarchical structures, from foot soldiers on the bottom, up to imprisoned gang members serving mandatory

sentences, sending out directives from prisons throughout the country. Gang problems extend to juvenile detention and correctional facilities as well.[19]

There is a strong correlation between youth gangs, violence, and drugs. In Denver, for example, only 14 percent of teens were gang members, but they were responsible for committing 89 percent of the serious violent crimes.[20] The ability to obtain firearms easily has increased the violent nature of gang warfare. Most gang violence is related to conflicts with other gangs. These turf disputes[21] generally occur in specific neighborhoods between gangs. However, gangs engage in criminal activity at several levels. Their violence spills over and impacts neighborhood residents or shop owners who are not involved in gangs. Gang activity also enables the black-market drug trade to pervade society. In a 1998 survey, drug sales accounted for 27 percent of gang-related crime, while theft and illegal entry constituted 17 percent and 13 percent, respectively.[22]

In addition to these social costs, the gang members themselves are victims in gang activity. Members face injury, death, and incarceration due to their delinquent behavior. The 1999 National Report on Juvenile Offenders and Victims found that 2.8 million juveniles were arrested in 1997. The violent death rate for drug-selling gang members is 7 percent per year.[23] The 1999 survey also reports that arrested juveniles accounted for 19 percent of all arrests, 14 percent of all murder arrests, and 17 percent of all violent crime arrests.[24] While there is much we can say about the causes of gang violence and involvement, we can only estimate the actual involvement of gang membership and gang warfare's toll on society. Current studies estimate that 25,000 individuals, mostly minority gang members, have been killed through gang-related violence.[25]

RISK FACTORS CONTRIBUTING TO GANG INVOLVEMENT

Individual

There are several personal attributes of at-risk youth that make them more susceptible to becoming gang members. Prior delinquency, drinking, and aggressiveness have been associated with early gang membership. One appeal of membership is that gangs can provide a way of solving social adjustment problems and the difficulties associated with adolescence. These inner-city youths attend the worst schools in the poorest neighborhoods with the highest dropout rate. Typically, they perform well below average. At-risk youth characteristically get into trouble at school and are labeled as "losers" by teachers and administrators. These youths are less committed to their academic performance and have limited educational expectations. Gang members may exhibit

deviant attitudes, a fatalistic view of the world, and in extreme cases, sociopathic characteristics.

When the Environment is Socially Toxic

The surrounding neighborhood for at-risk youths is characterized by the presence of gangs, drugs, and violence. In these neighborhoods, joining a gang can be a form of protection for youth. The community tends to be socially disorganized, featuring high mobility, poverty, welfare-dependency, and single-parent households.[26]

At-risk youth tend to come from dysfunctional families. Single-parent households contribute to a socially disorganized environment. Lack of parental role models, parental drug abuse, and a criminal model in the home negatively influence children. Gang members are often victims of abuse and neglect; abused and neglected girls are twice as likely to be arrested as juveniles.[27]

Children and adolescents growing up in situations of chronic danger from community violence, domestic violence, and interpersonal conflict face developmental challenges and increased health and educational risk.[28] Trends in urban violence and victimization suggest that youth are especially vulnerable. Though violent crime rates have been dropping over the past 10 years, the 1990s were devastating years for youth residing in the inner cities of America. In 1992, for example, 1 in 13 juveniles was a victim of a violent crime, a rate twice that found in the general population.[29] Although children are clearly at risk for being victims of violent encounters, as they transition into adolescence their risk steadily increases, with the victimization rate peaking between the ages of 16 and 19.[30] Youth are the most vulnerable age group with respect to violence, and African Americans experience an extremely disproportionate rate of victimization. Although African Americans constituted less than 15 percent of the U.S. population in 1992, half (50%) of all homicide victims in the United States were African American.[31] Homicide is the leading cause of death for black males between the ages of 14 and 44, with the majority of adolescent homicide victims killed by guns.[32] The trends are similar for nonfatal assaults. In 1992, African Americans were victims of robbery and aggravated assault at two to three times the rate of whites.[33] Inner-city African American adolescents may be the most vulnerable of all. Carl Bell, in a study of high school–aged youth residing in an impoverished Chicago neighborhood, reported that nearly one-quarter of teenagers in his sample had witnessed a shooting.[34] Another survey found that 45 percent of inner-city high school students had been threatened with a gun or had been shot at, and that one-third have been beaten up traveling to and from school.[35] Evidence suggests that exposure to severe violence in childhood and adolescence is correlated

with drinking, drug use, fighting, carrying a weapon, and trouble in school.[36] A Harris poll from 1996 found that one in eight youths carries a weapon for protection.[37]

There is reason to be cautiously optimistic, as the adolescent homicide statistics have declined steadily in recent years. From 1995 to 2002, the firearm homicide rates for black and Hispanic males declined substantially, from 101 to 48 per 100,000 for black males, and from 47 to 22 per 100,000 for Hispanic males.[38]

Peer Group and Protection

Along with neighborhood and family influences, the peer group is a significant factor influencing at-risk youth. Sustained interaction with antisocial youth is a key indicator for future gang affiliation. Socialized on the street, youth develop a tough, street-smart attitude. A strong affiliation to delinquent peers who use or distribute drugs is typical of urban at-risk youth. However, these peers are not necessarily reliable and dependable friends. In fact, it is not unusual to hear urban youth reporting a pervasive sense of distrust of their peers. This lack of trust is expressed in the marked distinction urban youth make between friends and associates. The less intimate term, *associates*, has arisen in some youth circles to describe the members of one's social network. Weak emotional attachments coincide with a perception of the world as unstable and unpredictable. "I don't have friends, only associates," is a phrase commonly used by both boys and girls to describe peers in their social network.

In an effort to feel safer by having a dependable group of youth to back them up when threatened, some youth turn to relatives for support, while others turn to gangs for protection. Eddie,[39] a small, rather unassuming youth, discusses his thoughts about joining a gang for protection:

Michael
Axelman (MA): Do you worry about gangs?

Eddie (E): Not in my neighborhood, like around the corner in another neighborhood, yeah.

MA: Do you think you'll ever join a gang?

E: I doubt it.

MA: Have you been approached, have you thought about joining?

E: Kind of, I hang with them a lot, but I ain't, in none of the gangs. I hang with a lot of different gangs. Like my cousin's in a different gang.

MA: What gang is he in?

E: One of my cousins is a Gangster Disciple, and my brother is a Stone [Black P Stone].

MA: Does your brother want you to join the Stones?

E: Not really. My other cousin's a Stone.

MA: What are some of the advantages and disadvantages of joining the gangs?

E: Like, say you get into it with somebody and they go get a lot of people they know. But you ask somebody to help and they like, "We ain't got nothing to do with that." But if you're in a gang, you know you could ask for their help, and you know they'll help. You know when you're in a gang or something, you're more than good friends, y'all like brothers or something.

MA: Is that appealing to you, to get that kind of help?

E: Yeah sometimes.

MA: How about the disadvantages? What do you think the problems are?

E: Like, the police mess with you all the time. It's like you hang around, the police come around and start just searching people for no reason. You'll probably get shot at, chased. You can't go in other neighborhoods.

MA: Well, now that you're not in any gang, do you feel like you can go into any neighborhood?

E: Not really. 'Cause they'll probably think you're in a gang. 'Cause it's if you walk in their neighborhood, and you're not in their gang, you know, they'll think you're, in the opposing gang, the opposite gang to them. And they'll try to jump on you. To me, let me tell you, I don't know. I might go in a gang, 'cause what's the sense? You can't go nowhere without somebody thinking you're in a gang. You're gonna get chased, jumped on, regardless, so you [might as well] have somebody in your corner. You know, you go in somebody else's neighborhood and you ain't nothing. They're still gonna jump on you.

MA: So you think maybe this summer you might join one, huh?

E: Uh huh.

MA: Which one do you think you're gonna join?

E: Um, probably the Stones like my brother.

Eddie is not alone. Protection is frequently cited by youth as the reason they joined a gang. Eddie resisted the temptation to join gangs until the 10th grade, but his reasons for staying out of the gangs appear now to be outweighed by the perceived benefits of joining. After enduring nearly two years of intimidation and aggression from peers who are in gangs, along with encounters with the police who assume that he is a gang member, Eddie seems to have had enough. Even though he is not in a gang, his movement through South Side Chicago[40] neighborhoods is compromised because when he enters certain

neighborhoods, the youth who control the block will "probably think [he] is in a gang." As Eddie notes at the end of the excerpt, "You're gonna get chased, jumped on regardless, so you [might as well] have somebody in your corner." The youths' perspective on joining gangs is at odds with school staff and law enforcement, who view gang symbols and gang membership unequivocally as a form of intimidation.[41]

Economics

In addition to the sociological factors, potential gang members are also motivated by economic factors. Young inner-city residents are limited by both poor education and limited skills training near to home. Entry-level jobs are often located outside economically distressed inner-city neighborhoods, and these jobs offer little more than minimum wage. Participation in a drug gang's economy is enticing. At the lowest level of involvement, foot soldiers can earn up to and above minimum wage by selling drugs. More so than this immediate opportunity, is the chance to progress up the hierarchical ladder. At the higher levels of gang involvement, members earn far more than any comparable job.[42] Along with the glamour attached to gang life, the possibility of higher profits motivates lower-level members to participate in the drug economy despite risks of incarceration, injury, and death.

THE SOCIOCULTURAL LANDSCAPE OF THE INNER CITY

The Social Context

The inner city has been identified as a difficult context for development.[43] The disappearance of employment opportunities and the traditional family headed by a married couple has become a characteristic feature of the inner-city ghetto.[44] Social and psychological problems abound in families, neighborhoods, and schools struggling with limited resources and depleted spirit.

William Julius Wilson, in his widely cited book, *When Work Disappears*,[45] discussed the decline of social organization as one explanation for the rise in social problems in the inner-city ghettos. Social organization is associated with the ability of residents to maintain effective social control and realize common values:

> [N]eighborhood social organization depends on the extent of local friendship ties, the degree of social cohesion, the level of resident participation in formal and informal voluntary associations, the density and stability of formal organizations, and the nature of informal social controls.[46]

Wilson posits a relationship between high rates of unemployment and the organization of family and community life. His research suggests that neighborhoods plagued with high levels of joblessness and poverty are more likely to experience problems with social organization, family stability, and marital commitment. Work anchors and organizes life with a system of concrete expectations and goals. Along with providing a way to make a living and to support one's family, work also constitutes the framework for daily behavior and patterns of interaction because of the discipline and regularities it imposes on a life. Youth reared in families and neighborhoods plagued by persistent unemployment frequently lack role models living structured lives. Without a sense of cohesion and stability in everyday life, the ability to plan one's future and set realistic goals is significantly diminished. In sum, the high rates of joblessness and endemic poverty that plague ghetto neighborhoods significantly affect the social context of the inner city.

Elijah Anderson, an urban sociologist who has conducted extensive ethnographic research in Chicago[47] and Philadelphia,[48] has examined the values and codes of families and individuals living in the inner city. He reports that the inner city is composed of two distinct family orientations—the "decent," and the "street." Anderson characterizes the vast majority of families living in the inner city as sharing mainstream values. These values include hard work, education, and the maintenance of a positive mental attitude and a spirit of cooperation. Most residents endorse the mainstream values associated with child rearing, honesty, and hard work. However, despair, poverty, and joblessness have spawned an "oppositional" culture—"the street"—whose norms and values are often at odds with those of mainstream society. "Street-oriented" parents tend to resolve disputes through verbal and physical aggression, and even young children from these homes perceive the world to be unpredictable, uncaring, and violent.[49] These children frequently experience a disorienting discrepancy between the expectations of home and street life, and the more mainstream values that characterize the school environment. This is especially true of aggressive behavior that is seen as necessary for survival, or at least for the preservation of manhood and respect.[50]

The violent and unpredictable life circumstances that many inner-city teens face on a daily basis shape the perception of both youth and adults concerning the nature of successful developmental outcomes. The commonality and unpredictability of violence can lead to preoccupying vigilance accompanied by blunted emotional reactivity,[51] as well as a host of stress-related disorders.[52]

The Code of the Streets

The "street" is the primary mode of socialization for youth residing in the inner-city ghetto who lack a stable, structured family life organized by mainstream values. A particular aspect of this local cultural milieu has been referred

to by Anderson as, "the code of the street."[53] The code revolves around the presentation of self. Inner-city peer culture in adolescence to a large extent is organized around suspicion of others. Support from peers is not expected, and blood and fictive kin, and at times fellow gang members, are seen as the only reliable sources of peer support. Folk beliefs about "making it" in school and on the streets highlight independence and self-reliance.[54]

An important requirement is the display of a certain predisposition to violence. In public, one must send a convincing message to the next person that one is capable of taking care of oneself and will engage in violence when necessary. When possible, one must avoid appearing weak, ineffectual, or cowardly.

Gang affiliation or lack of affiliation in many ways defines who you are as a person on the streets. In Chicago for example, it is not uncommon to hear gang-affiliated youth referring to one another with phrases like "he GD," or "no man, he Folk." Gangs in Chicago traditionally belong to one of two alliances, Brothers or Folks. Both alliances were established in the 1980s in the penitentiary system by incarcerated gang members, seeking protection by forming coalitions. There are many symbols the gangs use to distinguish themselves as Brothers and Folks, but the two most common are the star symbol and the way in which members wear their baseball caps or hats. The five-pointed star is used by the Brothers and the six-pointed star represents the Folks. The symbols are displayed on gold rings, necklaces, and earrings as well on tattoos on the upper arms and calves. Brothers cock their hats to the left, while the Folks wear their hats to the right.

Males who are not affiliated with street gangs are called Neutrons. "Neutron" implies group affiliation through nonmembership, and street-oriented males who are not in gangs use the term frequently when asked about their status. Neutrons by definition are not involved with the selling of drugs and consequently lack the money to buy name brand clothes and fancy jewelry. They have only one defining characteristic: they do not cock their hats in either direction. When I asked Larry, who is a Neutron, about whether he was concerned about wearing a baseball cap he said emphatically, "not really, I just keep it straight. I make sure that it's straight!"

Culture of Respect

The norms and values that frame the world for these youth are embedded, to a large extent, in the code of the street. At the heart of this code is the issue of respect.[55] Respect involves being treated right and being granted the deference one deserves.[56] Respect and associated behaviors are inseparable from the way in which adolescents attribute meaning to the world, and it underpins face-to-face encounters, on all levels of interaction.

A standard way of augmenting one's respect is to challenge other's status and "win." In the following excerpt, an 18-year-old former gang member discusses the importance of "proving yourself," and maintaining your respect on the streets:

MA: How about proving yourself? You told me you had to prove yourself. Now is that part of being on the streets?

Nick (N): Yea, see prove yourself, you know you gotta. Somebody gonna try you. You know somebody gonna say you a punk mark and all this and they gonna want to kick your butt. And you gotta prove yourself, you know that you ain't no punk and stand your ground.

MA: . . . So everybody, whether you are in gangs, whether you are not in gangs, you have to give people the message [interruption].

N: You ain't no hole, you ain't no punk, and you're gonna stand for what's yours and you ain't gonna let nobody take that down.

Although this type of posturing is especially important in relations between gangs and within gangs, it is also central to interactions that are not directly affiliated with gang life. On the streets, to engage in violence is respected, and having respect is essential for, and interconnected with, the expression of power. The following excerpt with the same former gang member makes clear how violence for reputation is connected with violence as an expression of brute force, power.

MA: But you said you participated in some drive-bys. What was the reason for those?

N: Just to build my name up. I ain't gonna lie. That's so people say, "Yeah, he went out and shot some somebody man, that nigga's cold. Don't mess with him."

MA: So it wasn't like you were shooting somebody over drugs or turf?

N: Just to go out and do it?

MA: It was a random person?

N: Yeah. Just to, you know, just to get the feeling, put a gun in your hand and shoot it.

MA: How did it feel when you did it?

N: I was amazed by it. I ain't gonna lie. The first time I shot a gun . . . , you might get a little trigger happy. You might want to go and shoot some more people, you know what I am saying. And once you get the feel for it, it's amazing, like you never felt nothing that powerful in your hand in your whole life. And when you shoot it you get this tense jerk

back, and you know you like, I got the power in my hand. Just like, if
you seen the movie *Juice.*

It is important to emphasize that this youth, who was 16 years old at the
time of this particular shooting, engaged in random drive-by shootings both
as a means of conveying his sense of power and as a relational strategy in the
service of self-preservation. His intent was to send the message—back off—to
others whom he felt were encroaching on his turf. He wanted others to know
that he was capable of these types of acts.

In this narrative excerpt, we see the way in which particular behaviors, espe-
cially violent behaviors, are both a response to and a re-creation of the social
disorganization of the neighborhood and the unpredictability that character-
izes street culture. Violence in the service of self-preservation has a destabiliz-
ing effect on the community, and it often results in the re-creation of violence
and unpredictability.

The Psychology of Dissin'

The word "diss" is used frequently by street-oriented youth. It is derived
from the word *disrespect* and it often used as a verb. For instance, one may say:
"don't diss me," or "don't be dissin' me." To diss is to violate or insult one's status
or personhood, and these violations are perceived to have a zero-sum quality.[57]
That is, if someone gains in respect, others are diminished. Dissing ranges from
an outright threat of physical violence to more subtle, but no less threatening,
forms of eye work such as staring someone down.

What follows is an excerpt from a 15-year-old gang member, who was
thrown out of high school for fighting and eventually enrolled in an alternative
school. The discussion begins with him talking about the problems he has had
avoiding fights at school:

MA: What do you think is going to happen in your new school?
Jack (J):   I could see myself in that school, probably having a fight, which I
         don't want to do.
MA: What if you decide not to fight, what happens?
J: You're beat up.
MA: You'll get beat up. So you have to defend [yourself]?
J: Right. Like the same situation I got kicked out of South Side High.
         Having to defend myself.
MA: So it's really is the school's fault because you don't have a safe envi-
         ronment to get an education in, that's what you're telling me.
J: Right. It shouldn't be like that.

MA: You have to watch your back.

J: It shouldn't be like that.

MA: Every day?

J: Yeah, shouldn't be like that.

MA: But I . . . who's at fault? Letting the school get like that?

J: I can't really blame it on the school. The people who's supposed to be doing things, but they got they minds somewhere else, so.

MA: Why would somebody want to beat you up at school?

J: Probably jealousy.

MA: Jealous about what?

J: Yeah, um, I'm not sure.

MA: So if somebody wants to beat you up, a lot of times you don't even know why?

J: Ain't gotta be doing nothing, you ain't gotta say nothing, just "Why" you know, like, "Why you looking at me so hard?" Then that's that right there.

MA: And if somebody said that to you what would you say to them?

J: Hey, you got a right to look where you want to, really. As long as I ain't disrespecting you, you shouldn't have a problem with it.

MA: Can you disrespect somebody just by looking at 'em?

J: Yeah. I say you can.

MA: And how would you do that?

J: I don't really know, it's you know how a person look at you. Like, look you up and down like. You know. And shaking their head and then that would be disrespecting.

To be "dissed" is an extremely humiliating experience for urban youth. These encounters involving the "theft" of one's pride are emotionally painful, and youth attempt to avoid these encounters at all cost. The notion of respect and associated behaviors are inseparable from the way in which adolescents attribute meaning to the world and underpin face-to-face encounters on all levels of interaction.

A diss encounter may involve taking something of material value from another (i.e., gym shoes, jewelry, jackets), but also involves an immaterial theft of someone's pride. Pride is often the primary motivation for dissing another person. Diss encounters are anchored on the shame-pride axis and involve stealing one's pride through shaming. These aggressive interpersonal encounters are extremely humiliating and are avoided by inner-city youth at all costs.

Research on emotions from clinical psychology indicates that when one is publicly shamed, he or she is thrust into an extremely unpleasant emotional state.[58] One's history of prior experiences with shame, and the meaning one attaches to these painful moments, determine the intensity and duration of

one's embarrassment.[59] Four defensive scripts that represent strategies for dealing with shame have been identified: withdrawal from the situation, avoidance of affect, attacks directed towards the self, and attacks directed towards the other.[60] Although each of these scripts affects interpersonal relations in important ways, attacks directed towards the other, which involve the transformation of shame into rage, are particularly damaging to community relations because these externalizing responses perpetuate the shaming process. An individual who employs this strategy purges unwanted, negative affects by transforming shame into rage and then "infecting" another person. The shame-rage cycle toxifies community relations, with one shaming encounter leading to another.

IMPLICATIONS FOR ADOLESCENT DEVELOPMENT

Peer Group as Parent

Erik Erikson's theory of psychosocial development[61] has provided an important framework for understanding the role of adolescence within the life course. Adolescence, the developmental period between childhood and adulthood, is marked by significant physical and psychological changes. During adolescence, along with coming to terms with the hormonal and physical changes associated with puberty, youth are confronted with identity formation as the central developmental task. While engaged in this psychosocial process, youth become increasingly focused on questions related to self-definition. Identity formation is a complex developmental process composed of multiple psychological, sociocultural, and intrapsychic components. Experimenting with one's persona, and determining whether it brings affirmation or denigration from others, is a typical emotional experience for the adolescent preoccupied with the challenge of identity formation.[62] Adult role models are among the most important social components for adolescents.[63]

The quest for self-definition does not take place in a social vacuum. The search for the answer to the question, "who am I?" involves experimenting with a variety of identities. This search is embedded in particular sociocultural contexts.[64] The creation of one's identity happens locally, and is significantly influenced by three social institutions: the family, the secondary school, and the peer group.[65] The family is the chief socializing influence on adolescents, and parental expectations and evaluations play and important role in shaping the adolescent's search for self-definition. Adolescents who are further along in identity formation are more likely to have parents who encourage self-assertion and freedom to disagree, while at the same time encouraging connectedness to the family.[66] Frequent interaction with a parental role model seems to positively affect the intellectual and social maturation of adolescents.[67] However,

although the family plays a critical role in the development of adolescents, typical teens spend a significant portion of their time, almost three and half hours a day, at home without parents or other adults present.[68]

Evidence suggests that inner-city adolescents may be even more estranged from their parents than suburban teenagers. When questioned, inner-city youth had difficulty identifying significant role models in their lives.[69] Though the youth in Darling and colleagues' study expressed strong affection for family members, nearly half of his sample reported no significant role model identifications. In addition, inner-city youth have less positive identification with parents, especially fathers. Fewer than a third of inner-city African American adolescents mentioned their father as a positive source of influence on their lives, and an almost equal number characterized their father's influence as largely negative or indifferent.[70] Considering the lack of positive identifications with fathers in inner-city families, adult males outside of the family play a particularly important role.

Increasing attention has been placed on school and community influences on adolescent development, and on the potentially ameliorative properties of adolescents' relations outside of the family.[71] Schools serve an important social function by bringing adolescents into daily and sustained contact with adults outside of the family. Studies on resiliency suggest that relationships with teachers have the potential to buffer youth from stress, as well as provide them with essential role models.[72] However, research suggests that social support and role models available to urban youth may be limited. Shortages of minority teachers may detrimentally affect minority youth's attempts to forge stable identities.[73]

The peer group also has a major impact on the adolescent socialization process. Peers serve as a reference point for adolescents to compare their emerging sense of competence in a variety of psychosocial, intellectual, and physical areas. Within the peer group, the adolescents test their developing identities and their evolving sense of independence and autonomy.[74] The important role of the peer group for low-income youth has been noted by a number of researchers.[75] The increased value of peer relationships in urban settings has been linked to the breakdown of the traditional family and the subsequent loss of parental authority,[76] and to the collapse of mentor/protégé relationships in the inner city.[77]

Elijah Anderson, in his urban ethnography, *Streetwise*, discusses the collapse of nonparental adult-adolescent relationships in African American communities in the inner city.[78] He reports the disappearance of particular adult male role models, old heads, who provided guidance and advice to urban black youth. He describes the "old head" as a man who was employed in a stable job and was

strongly committed to family life. His role in the community was to socialize young men to meet their community and family responsibilities.

> The old head was a kind of guidance counselor and moral cheerleader who preached anti-crime and anti-trouble messages to his charges. Encouraging boys to work and make something of themselves, he would try to set a good example by living, as best he could, a stable, decent, worry-free life.[79]

The reasons for the collapse of this mentor/protégé relationship are complex and involve many sociological and economic factors. However, one thing is certain: the breakdown of this relationship has had a devastating impact on urban black families, especially on inner-city youth.

For African American youth, successfully completing the tasks associated with adolescent development has often been problematic due to a complex set of sociocultural and historical forces that often inhibit success.[80] Due to the stress and poverty associated with inner-city life, it is not uncommon for inner-city youth to reach adolescence with a basic mistrust for their environment; mistrust that contributes significantly to role confusion and doubts about their ability to make it in the world.[81] Self-doubt and lack of trust in others make the process of identity consolidation problematic. This is compounded for many inner-city boys who must engage in the process of identity formation with minimal or no positive adult male role models.[82]

Psychological Sense of Belonging

Through gang involvement, youths are able to believe in something greater than themselves and to achieve a sense of belonging. Each gang community has its own name—the Latin Kings, Aryan Nation, Conservative Vice Lords, and Gangster Disciples, to name a few. Language and dress distinctively mark each gang, and members may be identified by gangs colors, such as blue or red. A person becomes a member through being "jumped in" by fellow gang members. Youths are personally invested in the gang's activities, and the gang as a whole has influence over its members and determines behavior and activities such as drug sale or turf warfare. As a member progresses up the chain of command, the more that member influences the gang's activity. Thus, members' behavior is also determined by the desire to move up in the gang and gain power.

However, the sense of community in a society offered by a gang fails to provide for the basic needs of disenfranchised urban youth. According to researcher Samuel Sarason, "a sense of community is one of the major bases for self-definition."[83] A sense of community is defined by four elements: membership in the group, influence in the group, fulfillment of need, and shared connection.[84]

Gangs provide a sense of community through the fulfillment of needs not met in the inner city. As a member of a gang, an individual is able to carve out an identity—each person is identified by a different name and establishes respect through their tough behavior. Gang members are rewarded for their actions within the gang community. Honor and humiliation are taken seriously: an attack on a member results in retaliation by the gang. Individuals are rewarded for being tough, and in return are provided a community that offers support and protection—two key elements in the rough environment of the street.

Gang membership is subject to a natural "aging out" process. While 6 percent of youths will continue criminal activity throughout their lifetime, the large majority of juveniles desist in their behavior.[85] As gang members transition into adulthood they have little or no useful life skills. In the past, youths engaged in antisocial behavior would transition to jobs. However, there are notably fewer jobs for delinquent youth to age into as we have shifted into a postindustrial economy with more focus than ever before on cognitive and interpersonal skills.

SOLUTIONS

Providing educational and job training opportunities to disenfranchised neighborhoods has been identified as a key ingredient of successful community programs that aim to reduce gang violence. Gang members frequently lack the skills and educational background to obtain jobs, and with fewer and fewer jobs available, youth are more motivated to join gangs. Thus, the provision of better schools, job and skills training, and a significant increase in job opportunities to urban youth are considered necessary public policy interventions to resolve gang activity.

In *Street Wars*, Thomas Hayden argues that participation in the drug trade and working "McJobs" should not be the standard for urban youth's economic options.[86] Public policy interventions are required to eliminate the delinquent activity of inner-city gangs. Again, focused prevention as opposed to late intervention or suppression has been unanimously approved as the best practice solution.[87] Prevention efforts should begin early, target youth exposed to multiple risk factors, and address all facets of youths' lives.[88] Public policy efforts can be informed through research and evaluation of existent programs. Programs often have short life spans because changes either did not provide a quick solution or because of changing administrative positions and priorities.

Harsh police responses have been found to negatively impact and perpetuate gang violence. Beyond the legal process of incarceration itself, the state of prison life is deplorable. Instead of rehabilitation for inmates and detained youth, guards are known for violent acts towards inmates and fostering intergang rivalry.[89]

The consensus that police suppression is not effective comes from analysis of several programs implemented by law enforcement agencies around the country, such as Operation Hammer by the Los Angeles Police Department and the Flying Squad program by the Chicago Police Department. During a typical weekend under Operation Hammer, 1,000 police officers descend on a small section of south-central Los Angeles. In one weekend, 1,453 arrests were made, half of whom were not gang members. Ultimately, charges were filed against only 32 of those arrested.[90] These types of police practices humiliate and traumatize adolescents and young adults, and further erode the fragile sense of trust that urban youth have in law enforcement.

Another type of program has been implemented by the Bureau of Alcohol, Tobacco and Firearms called Gang Resistance Education and Training (GREAT). This school-based gang prevention curriculum consists of a nine-week course discouraging kids from delinquent and gang behavior. Similar to the Drug Abuse Resistance Education, or DARE program, GREAT uses a cognitive approach to teach alternative methods of solving problems in order to avoid delinquent and violent behavior. This program has now spread throughout schools in 50 states and several other countries.[91]

Policy interventions have also been undertaken by the Bush administration: Project Safe Neighborhoods (PSN) is a federally funded one billion dollar initiative to reduce the use of guns in violent crime.[92] The Boston Reentry Initiative of PSN has had some initial success in assisting violent criminals and former gang members in their transition out of prison.[93]

In addition to public policy efforts, the efficacy of community-based organizations is of notable importance in reducing gang activity and violence. Community building can provide a sense of belonging and respect to youths who have no other option but street culture and can prove effective in reducing gang activity and violence. The program Barrios Unidos is one of the most successful organizations targeted at reducing gang violence. The program has four main principles: to learn constructive self-discipline, to create positive self-image, to develop skills, and to implement skills learned.[94] Community-based economic initiatives such as Westside, a clothing store in Los Angeles, are outgrowths of the Barrios Unidos efforts.

Irving Spergel of the University of Chicago, who has conducted extensive community-based research on the youth gang problem, has concluded that the lack of social opportunities available to teens and young adults in a particular neighborhood and the degree of social disorganization present in a community largely account for its youth gang problem. Spergel has developed the five-part "Comprehensive Gang Model to address these very issues: 1) to mobilize community leaders; 2) reach out to gang-involved youth; 3) provide economic, social, and educational resources; 4) include law enforcement suppression; and

5) facilitate cooperation by community agencies to provide holistic services to youths."[95] Results from the evaluation of the Little Village Gang Violence Reduction Project in Chicago show that the model is effective in lowering crime rates among youth gang members.[96]

Another example is the Boys and Girls Club of America. This organization developed the Gang Prevention Through Targeted Outreach program. It targets youth at risk for gang involvement and seeks to alter their attitudes and perceptions. The approach consists of structured recreational, educational, and life skills programming.[97] It illustrates a key feature of Spergel's recommended approach to gang prevention and intervention: the mobilization of community efforts by community-based agency staff.[98] The consensus of most research and program evaluation is that prevention efforts geared toward at-risk youth is the best-practice solution to dealing with gangs in our society.

Successful measures in community-based solutions to gang violence often include local clergy. Some successful programs were initially started by clergy committed to at-risk youth. In contrast to the Los Angeles Police Department's Anti-gang unit, Operation Hammer, Jesuit priest Gregory Boyle started Jobs for a Future (JFF) in the housing project neighborhoods of Pico Gardens and Aliso Village. There are several organizations within JFF that employ former gang members, such as a bakery. Through this organization, former gang members can have their tattoos removed and receive clothing and training for job interviews.

CONCLUSION

Adolescents coming of age in the impoverished inner cities and rural towns throughout America are at risk to becoming involved in youth gangs. Gang life seemingly offers a ready-made solution to teens living in situations of chronic poverty and danger and struggling with the developmental tasks associated with adolescence. Youth gang membership provides an identity and an intense sense of belonging to a group built upon loyalty and obedience. Though gang membership solves many of the short-term issues faced by disenfranchised teens, these youth frequently lack the basic educational and job skills to succeed in mainstream society. The youth gang problem cannot be solved by scapegoating urban teens. Youth gang violence is a social problem that must be addressed through social solutions.

In order to facilitate the education and development of youth who are at risk for becoming gang members, we need to learn how to best create and maintain positive, trustworthy intergenerational relationships for these youth at home and in school. We also need to find ways to make the social and educational institutions of the inner city more conducive to the forming of these essential

relationships. It is only through interactions with caring, healthy, society-minded adults that adolescents can move into adulthood. The developmental and social consequences are grave indeed when the peer group becomes the parent.

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Substance Abuse among Adolescents

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Substance abuse and dependence are among the most prevalent causes of adolescent morbidity and mortality in the United States.[1] Adolescent substance abusers experience numerous social, academic, physical, and legal consequences[2] (e.g., problems at school, truncated development). Substance-dependent adolescents endure additional problems such as drug tolerance effects, withdrawal symptoms, and preoccupation with drug use to the exclusion of other activities. At present there is a paucity of systematic research on adolescent substance abuse and dependence.[3,4] This chapter provides a review that synthesizes major aspects of the recent scientific literature on adolescent substance abuse and dependence. This chapter is divided into four sections. The first section begins by discussing distinctions between substance use, abuse, and dependence. This section then includes a brief review of differences between adolescent and adult substance abuse. Next, data are presented regarding the current trends in substance abuse among adolescents, including the prevalence of the different types of drugs. Then, the many consequences of drug use are briefly discussed, followed by a summary of the correlates or predictors of adolescent substance abuse and dependence disorders, as well as treatment outcomes. The second section of the chapter presents various assessment methods available to diagnose adolescent substance abuse and dependence. This section discusses separately the assessments of alcohol abuse and abuse of other drugs.

The third section of the chapter briefly discusses prevention and then provides a more in-depth presentation of treatment approaches. Specifically, it provides a brief discussion of the key elements of effective adolescent substance

abuse and dependence treatment programs, addresses the important issue of the individuals' motivation to enter or remain in a treatment program, provides descriptions of the primary treatment modalities currently being implemented among adolescents, and provides a summary of studies that have contrasted or evaluated the various treatments. This section also presents information on other potentially useful treatment options for adolescents and provides information on recovery and relapse prevention. Finally, the fourth section of the chapter examines future potential directions and needs for more effective programming in the treatment of substance abuse and dependence among adolescents.

SUBSTANCE USE, ABUSE, AND DEPENDENCE

Substances of Abuse

The term *substance*, when defined in the context of substance abuse and dependence, refers to substances that are taken into the body, have a direct or indirect effect on the central nervous system, are not used as prescribed by a professional, and may lead to various negative consequences for the drug user. The American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (fourth edition, text revision)[5] currently ascribes substance abuse to the following 10 classes of substances: (1) alcohol; (2) amphetamines (including "crystal meth," amphetamine-like substances found in appetite suppressants, and medications used in the treatment of attention deficit and hyperactivity disorder [ADHD]); (3) cannabis (including marijuana and hashish); (4) cocaine (including "crack"); (5) hallucinogens (including LSD, mescaline, and MDMA ["ecstasy"]); (6) inhalants (including compounds found in gasoline, glue, and paint thinners); (8) opioids (including morphine, heroin, codeine, methadone, oxycodone [OxyContin (TM)]); (9) phencyclidine (including PCP, "angel dust," ketamine); (9) sedative, hypnotic, and anxiolytic (antianxiety) substances (including benzodiazepines such as valium, barbiturates, prescription sleeping medications, and most prescription antianxiety medications); and (10) other substances (this category permits recording new or other substances). Nicotine and polysubstance use are referred to when substance dependence is diagnosed. Caffeine has also been identified as a substance in this context; however, currently there is insufficient evidence to establish whether caffeine-related symptoms constitute substance abuse and dependence. As indicated, substances of abuse may be widely available substances such as alcohol or glue, over-the-counter drugs, or prescription medications. In many cases, the substance of abuse may have been legal and even medically prescribed for the user; however, abuse occurs when the pattern of use diverges from use as intended or prescribed.

Definition of Substance Use, Abuse, and Dependence

Substances are widely used by adolescents as a means of enjoyment, independence, rebellion, instant gratification, escape, or self-medication, or as an effort to belong to a peer group or achieve a desired adult-like identity.[6] Substance use by adolescents may follow certain progressive patterns, for example, as delineated by the gateway drug theory.[7] Generally, alcohol and tobacco, followed by marijuana, are the first drugs of abuse that young people experiment with or use. If use of the gateway drugs continues, cocaine, hallucinogens, inhalants, and black-market prescription medications are likely to be used next. Research on substance-use onset trajectories has also indicated some interesting findings regarding use of multiple gateway drugs, including data that suggest that use of both alcohol and tobacco is more likely to lead to other substance use, as opposed to use of alcohol only, and experimental use of tobacco but not alcohol (in the seventh grade) may accelerate the initiation and progression of other substance use, as measured one year later.[8] Further, research conducted by Collins and colleagues[9] has shown that caffeine may also be an early step (i.e., gateway) drug because heavy caffeine use has also been shown to be related to a progressive pattern of type of drugs used.

The initiation and progression of substance use may be characterized on a substance use, abuse, and dependence continuum. This continuum begins with initial drug use and may progress to harmful use and addiction, with various problems present along the spectrum. Substance use may be defined as low to moderate use with no social, role-based, environmental, psychological, health, economic, legal, or familial consequences. However, use may be complicated by potential legal consequences (and attempts at concealment) if illicit drugs are involved.

Substance abuse, as defined by the *DSM–IV–TR*,[5] is a maladaptive pattern of substance use leading to clinically significant impairment or distress as manifested in a 12-month period by at least one of the following: (1) recurrent substance use resulting in failure to fulfill major role obligations at work, school, or home (e.g., poor performance at school or work, neglect of children or younger siblings); (2) recurrent substance use in hazardous situations (e.g., driving while intoxicated); (3) recurrent substance-related legal problems (e.g., DUIs); and (4) continued substance use despite having recurrent social or interpersonal problems related to substance use (e.g., arguments with family members about consequences of intoxication).

Substance dependence has been defined by the *DSM–IV–TR* as a maladaptive pattern of substance use leading to clinically significant impairment or distress as manifested in a 12-month period by three or more of the following: (1) tolerance (with repeated use, a person will no longer achieve the same degree

of pleasurable effect experienced in the past and must use increasing amounts of the substance to get the same pleasurable effect); (2) withdrawal (when physically dependent on a substance, individuals will develop withdrawal symptoms that cause distress or impairment when use stops or the amount is cut down; the person will continue to use the substance to avoid the withdrawal symptoms); (3) the substance is taken in larger amounts or over a longer period of time than intended; (4) the person experiences a persistent desire or unsuccessful efforts to cut down or control substance use; (5) a great deal of time is spent in activities necessary to obtain the substance, use it, or recover from its effects; (6) important social, occupational, or recreational activities are given up or reduced because of substance use; and (7) the substance use is continued despite knowledge of having a persistent physical or psychological problem that is likely to have been caused or exacerbated by the substance.

Differences between Adolescent and Adult Substance Abuse

The ways in which adolescents differ from adults in the development and expression of substance abuse raises important questions as to whether different criteria should apply to youth than those currently applied to adults. Adolescent substance abuse may differ from adult substance abuse in at least six ways. First, regular use may or may not be considered abuse in adults, whereas it might be considered abuse in youth because of the potential of such use to interfere with brain developmental growth and adjustment tasks.[3,10,11] Conversely, some researchers and practitioners have argued that some substance use represents normal development among teens as they begin to explore different life roles.[12] Second, adolescents may tend to exhibit less physical dependence and fewer physical problems related to use (alcohol, in particular) and consume less overall. Rather, teens may exhibit more binging-type behavior—for example, drinking as much as adults when they do drink, but drinking on fewer occasions and presumably being less prone to blackouts.[3,13–15] On the other hand, adolescents who do begin to drink (or use other drugs) more heavily will tend to become dependent on alcohol (or other drugs) much more quickly than will adults[15] (e.g., less than a year versus over several years).

Third, high-risk situations may differ between adolescents and adults. In particular, adolescents may be more likely to use drugs in situations in which they are not responsible for taking care of others. Fourth, teens may have relatively higher rates of dual diagnosis, that is, comorbidity of substance-use disorders and other mental health disorders.[1] More than half of the youth in treatment for substance-use disorders have other psychopathology in addition to substance-use problems[16,17] (e.g., depressive and anxiety disorders, social

phobia, PTSD, conduct disorders, or oppositional defiant disorder). Fifth, teens may be less likely to seek treatment and relapse more quickly than adults do after treatment.[18,19] Finally, adolescents may have a higher likelihood of suffering social consequences specific to adolescence[2,20] (e.g., problems at school, statutory difficulties, truncated development). More systematic research is needed to increase our understanding of the specifics of adolescent substance abuse.

The *DSM–IV–TR* criteria may be less applicable when diagnosing adolescent substance-use disorders than adult substance-use disorders in one other notable way.[12,20,21] The stochastic process of substance abuse to dependence is not clear cut among teens (this may be true of adults too, but to a less extent). For example, an early consequence of teen substance use is the development of tolerance to a drug, a substance-dependence criterion. Another early consequence is excess time spent on getting the drug, using it, and recovering from its effects. Eventually, the young drug user develops social and role consequences, shows unsuccessful efforts to control use, legal consequences, and use in dangerous situations. Even later in the temporal order of consequences, the user exhibits withdrawal symptoms, uses larger amounts over a longer period, important activities are given up, and the user demonstrates continued use despite drug-related problems (e.g., paranoid reactions, leading to hospitalization). This order of symptoms has led some researchers to suggest the "withdrawal gating hypothesis," that is, that a greater weighting on substance abuse dependence given to withdrawal symptoms would preserve the stochastic perspective of abuse to dependence disorders.[22,23]

Currently, only 10 percent of the estimated 1.4 million teens with an illicit drug problem are receiving treatment, compared to 20 percent of adults.[24] In fact, the first systematic investigation of highly regarded treatment programs for teens in the United States has only very recently been conducted.[1] The results of this evaluation indicate that much improvement is needed in existing programs. Given potential differences in the nature of teen versus adult substance abuse disorder, it is also possible that teen-specific substance abuse is currently underestimated in prevalence.

Prevalence of Substance Use and Abuse among Adolescents

Despite recent national data indicating some small and sporadic declines in adolescent use of various substances since the beginning of the last decade (and somewhat larger declines relative to 1980), substances of all types are still being widely used or abused by both younger and older teens in the United States.[25] In 2004, the proportions of 8th, 10th, and 12th graders who reported that they had used an illicit drug in the prior 12 months were 15 percent,

31 percent, and 39 percent, respectively. The proportions that had reported ever trying an illicit drug in their lifetime were 22 percent, 40 percent, and 51 percent, respectively. Marijuana, by far the most widely used illicit drug, showed lifetime rates of 16 percent, 35 percent, and 46 percent, respectively. At the same time, use of stimulants remained widespread, with respective lifetime prevalence rates of 8 percent, 12 percent, and 15 percent for amphetamine use; 3 percent, 5 percent, and 6 percent for methamphetamine use; and 3 percent, 4 percent, and 8 percent for ecstasy use. Prevalence data on opiate use, such as heroin, for example, indicate lifetime rates among 8th, 10th, and 12th graders of 1.6 percent, 1.5 percent, and 1.5 percent, respectively. Rates of use of legal drugs also were rather high among teens. For example, respective lifetime prevalence rates of tobacco use were 28 percent, 41 percent, and 53 percent, while rates of lifetime alcohol use were 44 percent, 64 percent, and 77 percent, and of ever being drunk were 20 percent, 42 percent, and 60 percent, respectively.

According to Tarter,[11] approximately 5 percent of adolescents in the United States qualify for a diagnosis of substance abuse disorder. Among older teens, some studies are finding alarmingly high substance abuse and dependence rates. As examples, within a sample of New Jersey regular high school students ($n = 1044$), 13.4 percent and 3.9 percent of the sample were found to suffer from substance abuse and dependence disorders, respectively,[26] and within a sample of southern California alternative high school students ($n = 1936$), 36.7 percent and 19.1 percent were found to suffer from these disorders.[27]

Consequences of Use

Substance abuse and dependence disorders cross all ages, gender, ethnicities, and educational and socioeconomic status, leaving virtually no group unaffected. Substance use may result in a variety of negative physical, psychological, and social health effects to an individual, and its effects can be acute[6] (resulting from a single dose or a series of doses) or chronic (resulting from long-term use). The toll of drug use can be especially great during adolescence or in young adulthood.[27,28] A multitude of negative consequences may befall substance abusers. First, for example, adverse immediate consequences occur[29] (e.g., overdoses and accidents; the incidence of older adolescent and young adult drinking and driving is double that of the general population). Second, those teenagers who are heavy drug users also tend toward early involvement in family creation, and divorce or unhappiness in these relationships. Third, crimes such as stealing, vandalism, and violence are associated with heavy drug use in adolescence. Fourth, drug-abusing youth are less likely to graduate from high school, or take longer to graduate. Fifth, while these youth tend to earn more money

than nonusing same-age peers, they also tend to seek less skilled employment sooner than their peers and job stability is lower. Sixth, drug-using youth are more likely to develop disorganized thinking and unusual beliefs that may interfere with problem-solving abilities and emotional functioning. Seventh, adaptive coping and achievement behavior are lessened. Eight, heavy hard drug use predicts greater social isolation and depression. Finally, drugs of abuse also may lead to health consequences, including cardiovascular complications, lung problems, and digestive or excretory problems.[6]

Substance abuse and dependence may also be viewed as a public health problem with far-ranging health, economic, and adverse social implications. Substance use-related disorders are associated with societal problems such as teen pregnancy and the transmission of sexually transmitted diseases, as well as failure in school, unemployment, homelessness, and crimes such as rape and sexual assault, aggravated assault, burglary, robbery, and homicide. The estimated cost of alcohol-related disorders alone (including health care expenditures, lost productivity, and premature death) in the United States was over $160 billion in 1995.[30]

Correlates or Predictors of Adolescent Substance Abuse and Dependence Disorders

Substance abuse is a multifactorial biopsychosocial process.[6] Consequently, there are multiple factors and causal pathways that influence substance abuse and dependence. Many suspected influences contributing to substance abuse are not easily modified (e.g., genetics, although the future of genetic engineering is promising), whereas other influences are more amenable to change (e.g., peer influence). Several concurrently or prospectively measured influences have been found to be associated with substance abuse and dependence disorders among adolescents. These variables or influences can be categorized as extrapersonal or intrapersonal predictors. Extrapersonal predictors include environmental, cultural, and social influences. These influences are exogenous to the individual (i.e., external to or outside the individual) and include interactions with others in various contexts and locations, as well as the learning of social behaviors from significant others. Some key extrapersonal determinants found to be predictive of substance use among adolescents include environmental variables such as distance from a drug distribution route or neighborhood disorganization,[6,31,32] social variables such as peer substance use,[2,33,34] parental substance abuse,[33,35–38] and family history of psychopathology and conflict.[35,36,39,40]

Intrapersonal predictors or processes contributing to individual differences in substance abuse etiology include physiological susceptibility, as measured in

research on genetics[40,41] (e.g., twin studies and investigation of phenotypes), and the affective traits and personality correlates of neurobiological processes; explicit cognitions, including beliefs or expectancies as a motivation to engage in alcohol or other drug use behavior;[42–47] and implicit cognitions, including attentional and behavioral biases influenced by associative learning and memory processes.[48–50]

Intrapersonal influences also include comorbidity variables such as suicidal ideation and depression,[33,51,52] trauma exposure and post-traumatic stress disorder,[38,53] attention-deficit hyperactivity disorder, and conduct disorder. Other trait correlates of neurobiological processes that have been shown to influence substance use initiation and problem consequences from use include impulsivity, sensation seeking, anxiety sensitivity, and aggression.[27,33,40,51,54–57] Additionally, neuropsychological differences (e.g., in attention, executive cognitive function, behavioral self-regulation, and emotional regulation) have been found between teen drug abusers and nonabusers; however, the order of causation is not clear.[40,58] Intrapersonal influences that affect substance abuse likely play a more active role than external influences in explaining why some individuals who use do not go on to abuse or become dependent while others do. Integrative theories of substance abuse and dependence incorporate a variety of influences in an attempt to explain substance use trajectories.

For example, one theoretically based prospective study of the prediction of substance abuse and dependence was conducted by Sussman, Dent, and Leu.[34] These researchers examined one-year prospective predictors of self-reported substance abuse and dependence among a sample of 702 youth at high risk for drug abuse from 21 southern California continuation (alternative) high schools. Triadic influence theory was used as a theoretical guide, from which predictors were selected for assessment.[32] Triadic influence theory attempts to classify experimental drug use into three substantive domains (interpersonal, attitudinal/cultural, and intrapersonal), with differing distances from performance of drug use behavior (ultimate, distal, and proximal). Within the interpersonal domain, ultimate variables include home stress, distal variables include drug use role models, and proximal variables include social-related drug beliefs (e.g., perceived social approval for drug use, estimates of prevalence of drug use). Within the attitudinal/cultural domain, ultimate variables include community disorganization (community stress), distal variables include development of hedonic values or alienation, and proximal variables include expectancies regarding drug use benefits minus costs. Finally, within the intrapersonal domain, ultimate variables include biological temperament (biological stress), distal variables include low self-esteem and poor coping, and proximal variables include refusal self-efficacy and intentions to use drugs.

The Sussman, Dent, and Leu study[34] measured distal and proximal variables of triadic influence theory. Among 13 predictors, a drug use and intention index, and concern that one is or will become an addict or alcoholic, were consistently predictive of self-reported substance abuse or substance dependence one year later, controlling for baseline abuse or dependence status. In addition, baseline substance abuse, white ethnicity, and relatively poor prosocial coping predicted later substance dependence. Apparently, adolescents can predict their future use, and abuse or dependence status. This research also suggests that instruction in prosocial coping (e.g., seeking social support) may help inhibit the transition from substance abuse to substance dependence.

In addition, various other problem behaviors have been found to correlate with and predict substance abuse, including teen gambling[59] (of 97 substance abusers in an outpatient program in Connecticut, 57 percent were classified as social, nonpathological gamblers, and 9 percent were transitioning into pathological gambling), eating disorders,[40] school drop-out,[60] and criminal behavior.[54,60] Also, it has been documented that up to 75 percent of teen substance abusers are also daily cigarette smokers.[61]

Correlates or Predictors of Adolescent Substance Abuse Treatment Outcomes

Treatment outcomes among teens (e.g., 6 months to 12 months post-treatment), which generally have consisted of use of measures of drug use and abuse, and sometimes also quality of family relations, school behavior, or well-being, are affected by pretreatment factors. These pretreatment factors include pretreatment levels of parental substance use (in some studies but not all,[62]) sibling substance use, deviant attitudes, deviant behavior, impulsivity,[63–65] low self-esteem,[66] young age of first use, and multiple drug use,[62,66] but not pretreatment severity of drug abuse. Treatment outcomes are also predicted by comorbidity of substance use disorders and other mental health disorders. Studies on adolescents with both substance use disorders and other mental health disorders have found greater severity of post-treatment drug involvement as well as higher relapse rates.[17,67]

Conversely, having abstinent friends, being socially and academically connected, and being goal-oriented are protective.[64,65] These are very similar to the protective factors that might inhibit the development of substance abuse or dependence, which include relatively high intelligence, problem-solving ability, social skills, high self-esteem, good family relationships, positive role models, and good affect regulation.[40]

Treatment outcomes also are predicted by some treatment factors. These include length of stay (a longer stay predicts better outcomes), degree of parental involvement (more involvement predicts better outcomes), aftercare participation[63] (attendance predicts better outcomes), having a realistic attitude and being able to achieve social support,[68] and ease of post-treatment contact with professionals.[69] Relapse rates appear similar to those of adults.[70]

ASSESSMENTS USED TO DIAGNOSE SUBSTANCE ABUSE AND DEPENDENCE

Several types of assessment methods are available to aid in the diagnosis of substance abuse among adolescents, including examinations of the individual's behavioral and family characteristics, physical findings and complaints, and laboratory tests. Clinically, assessments to determine diagnosis and treatment planning typically rely on an in-depth drug use history and psychiatric and physical examinations. This section reviews the various assessments commonly used, starting with examples of unstructured examinations and interviews, followed by examples from the large inventory of structured assessments. It should be noted that due to the paucity of treatment research among adolescents, many of the structured assessments available for use with this population are adaptations of adult interviews and questionnaires.

Reasons for and Goals of Assessment

There are several circumstances in which adolescents might be assessed for potential drug misuse.[6] These include situations that involve employment in which public safety is paramount (e.g., lifeguards, delivery personnel, driving vehicles, babysitters), obtaining a driver's license, student athletics, sharply worsened school performance, avoidance of social situations and sudden changes in mood, parental suspicion of social problems related to drug use, and individuals with a history of use.

The initial goals in assessment are to determine the nature of an individual's involvement with drugs of abuse and to assess psychological and medical status, psychosocial functioning, social supports, attitudes toward drug use, and motivation for initial abstinence. Detailed information is obtained regarding the individual's drug use history and related consequences, and comorbidity. Questions that might be asked include: Have you taken or tried any drugs? What do you use? How much (quantity)? Do your peers use any drugs? Does your best friend use drugs? Do your parents use drugs? What are your beliefs about drug use and abuse? How did you get into using drugs? How old were you when you first used? Have you experienced any legal or social problems

from drug use? What do the drugs do for you? How do they make you feel? Have you ever gone to a psychiatrist or other professional for mental health concerns? Any suicidal or homicidal ideation, or sexual or physical abuse? (Any disclosure of intended physical harm to self or others would need to be reported by the interviewer to the appropriate agency.) How much control do you think you have over your drug use? How long do your using episodes last? What happens? Do you seem to lose control over any other areas of your life? How about gambling? Sex? Spending? Eating? Exercising a lot? Studying or working long hours?[6]

Due to response demand problems, it is helpful to use corroborative methods of assessment, including family members' reports or biochemical methods. Of course, some differences in judgment as to whether or not an individual is a drug abuser should be based on variables such as age. For example, any use of an illicit drug, or a drug such as inhalants, by a child or young teen indicates potential immediate danger.

Mental Status Examination

A mental status examination generally is conducted as a systematic means of gathering psychological and behavioral data. The purpose is to provide an initial screening of an individual's mental health status, and to help suggest other means of assessment to determine whether or not a diagnosis of a formal psychiatric disease should be made. The mental status examination includes the assessment of appearance, attitude and behavior, speech, affect, thought and language, and perceptions and cognitive functioning such as insight and judgment.[71]

When performing a mental status examination, questions such as the following help provide a guideline to determine whether or not an adolescent is suspected of drug abuse or other psychopathology. Does the individual appear to be withdrawn, socially isolated, undernourished, agitated or depressed, tired, unable to concentrate, or uninterested in pleasurable activities, or unkempt in physical appearance? Is the individual hostile or uncooperative, evasive or defensive, and are there any discrepancies in reports of autobiographical events (i.e., lies, missing information)? Are any delusions or visual or auditory hallucinations reported? If so, what were the circumstances? Was the individual under the influence of mood-altering drugs at the time? After answering these questions, the individual might be assessed through a more specific interview assessment.

Drug Treatment History

The use of interviews or self-reports that elicit information regarding an individual's prior involvement in drug treatment programs, psychiatric facilities,

self-help support groups (e.g., 12-step programs), or public sanctions (e.g., court, juvenile hall, camps, or community schools) can be quite useful. Such data can assist in understanding the level of drug dependence (where individuals fall on the drug abuse continuum), occurrence of other compulsive behaviors and psychiatric difficulties, and motivation to stop using. It is also useful to assess the longest period of abstinence endured, both with and without the help of a structured environment. Many individuals will disclose that while in juvenile hall or prison ("locked up"), or while in treatment, they can remain abstinent, but when in the community, without some structure, they are unable to remain abstinent.

Frequency, Quantity, and Method of Drug Use, and Family Drug Use

Although questioning individuals about the frequency and quantity of drug use may not be essential in making a diagnosis of substance abuse, it is nonetheless associated with drug abuse–related dysfunction.[72,73] Of course, some individuals experience severe consequences while using relatively low levels of drugs (e.g., experiences of some Asian groups with alcohol), while other appear to experience few consequences on relatively high levels of regular use. However, high quantities of intake are highly correlated with occupational, social, and medical impairment. Frequency of use indicates how often individuals are using a drug. Frequency of drug use can be measured through self-reports of estimated lifetime use, yearly use, monthly use, and/or daily use. Unfortunately, this type of assessment lacks precision because of memory biases, social desirability, denial, and other response demands.

Recency of use does not indicate the duration or extent of the addiction, but it helps disclose the most current and reliable autobiographical events. Quantity of use is more predictive of problems or disruptive drug use than frequency[74,75] (e.g., binge drinking vs. small amounts of daily use). According to the National Household Survey on Drug Abuse, binge drinking is defined as consuming five or more drinks on one occasion at least 1 day in the past 30 days. Alternatively, heavy drinking is defined as drinking five or more drinks on the same occasion on 5 or more of the past 30 days.

The assessment of the method of drug intake may also help one to understand the level of addiction for those drugs that vary in means of use (e.g., cocaine and heroin). For instance, many individuals with crack cocaine addiction may have originally started by snorting powdered cocaine. Eventually, they switch to a different form of the drug—smoking crack—which is cheaper, readily available in small quantities, and which immediately potentiates dopamine transmission in the brain (e.g., nucleus accumbens).

Assessment of family history of drug use may further help to assess the level of addiction, perceived problems and consequences, attitudes toward drug use, and probability of relapse. Current use among significant others, and perceptions that drug use is simply a part of normal behavior, would lead one to expect future struggles with drug use.

The Structured Clinical Interview

The *DSM–IV–TR* is widely used in establishing whether or not an individual has a drug abuse disorder.[5] This manual also contains specific criteria sets for substance abuse, dependence, intoxication, and withdrawal applicable across different classes of drugs. The *DSM–IV–TR*'s Structured Clinical Interview (SCID-IV) is a broad-spectrum instrument that adheres to the standardized decision trees for psychiatric diagnosis and encourages multiple paths of exploration, clarification, and clinical decision making. It can be tailored to a variety of populations.[76] This interview is a primary measure of substance abuse disorder and substance dependence, with clarification particularly regarding efforts to decrease or control use, continued use despite problems, specific withdrawal symptoms of a drug, and assessment of comorbidity.

Structured Assessments of Alcoholism That Could Be Used with Adolescents

The *CAGE questionnaire*[77] is a self-report screening instrument that uses the mnemonic CAGE to assess problems with alcohol. It is a relatively sensitive four-item instrument that assesses attempts to Cut down on drinking; *A*nnoyance with criticisms of drinking; *G*uilt feelings about drinking; and use of alcohol as a morning *E*ye opener. When one answers yes to two or more questions, that individual is suspected of having alcohol problems. These questions could be adapted for other drug use, as well, by replacing the word *drinking* with *drug use*, and *a morning eye opener* with *the drug to get you started in the morning.*

The *RAFFT Test* (*R*elax, *A*lone, *F*riends, *F*amily, *T*rouble) was developed similarly to the CAGE, but as a brief screen specifically for teens; it consists of five items[78] (e.g., "Do you drink to relax, to feel better about yourself, or to fit in?"). Recently, Knight and colleagues[79] adapted RAFFT along with several other measures to create a brief screening of alcohol and other drug abuse. A six-item *CRAFFT Test* measure resulted (*C*ar, *R*elax, *A*lone, *F*orget, *F*amily or friends complain, *T*rouble). Items addressed riding in a car driven by someone under the influence, drinking or using to relax, drinking or using alone, forgetting things while drinking or using, family or friends telling the person

to cut down, and getting into trouble while under the influence. The CRAFFT shows good convergent validity and internal consistency.

The *Adolescent Alcohol Involvement Scale (AAIS)* consists of 14 items and examines type and frequency of drinking, last drinking episode, reasons for drinking, drinking situations, effects of drinking, and perceptions about drinking.[80] The measure shows a moderate internal consistency and convergent validity with a substance use disorder diagnosis.

The *Adolescent Alcohol Expectancy Questionnaire (A-AEQ)*[81] was developed to evaluate anticipated effects of alcohol consumption among adolescents. This 100-item inventory addresses expected effects in several domains, including global positive changes, changes in social behavior, improved cognitive and motor abilities, sexual enhancement, cognitive and motor impairment, increased arousal and relaxation, and tension reduction.

The *Comprehensive Effects of Alcohol (CEOA)* questionnaire[82,83] was developed to assess positive and negative alcohol effects and the subjective evaluation of those effects. This 76-item measure consists of several expected positive effects, including factors that address sociability, tension reduction, liquid courage, and sexuality, and several negative effects, including factors addressing cognitive and behavioral impairment, risk and aggression, and self-perception. The CEOA was developed among college students but has been found to be comparable to the A-AEQ.[84]

The *Alcohol Abstinence Self-Efficacy Scale (AASE)*[85] consists of temptation and self-efficacy items that are self-rated to assess an individual's confidence to resist use in several drinking situations. This instrument contains 20 efficacy and 20 temptation items (with four subscales). Key outcome variables include cues related to negative affect, social, physical, and other concerns, and withdrawal and urges.

Structured Assessments of Other Drugs of Abuse That Could Be Used with Adolescents

The *Substance Dependence Severity Scale (SDSS)*[86] is a clinician-administered structured interview (comprising 13 items) that was developed to assess severity and frequency of dependence across a range of drugs, based on the *DSM–IV–TR*. The test-retest, joint rating, and internal consistency reliabilities across alcohol, cocaine, heroin, marijuana, and sedative users is good.

The *Chemical Dependency Assessment Profile (CDAP)* is a 235-item multiple-choice and true/false self-report instrument used to assess substance use, dependency problems, and treatment needs among adolescents and adults. Domains addressed include quantity/frequency of use,

physiological symptoms, situational stressors, antisocial behaviors, interpersonal problems, affective dysfunction, treatment attitudes, impact of use on life functioning, and expectancies.[87]

The *Problem-Oriented Screening Instrument for Teenagers (POSIT)* is a 139-item self-administered yes/no questionnaire that was developed by the National Institute on Drug Abuse as part of their Adolescent Assessment/ Referral System.[88] POSIT contains 10 scales: substance use/abuse, physical health status, mental health status, peer relations, family relations, educational status, vocational status, social skills, leisure and recreation, and aggressive behavior/delinquency. This measure has good convergent validity, internal consistency, and test-retest reliability; it takes 20 minutes to complete.

The *Drug and Alcohol Problem (DAP) Quickscreen* consists of 30 yes/no items, and discriminates well between high-risk and low-risk users.[89] It was developed to be used in primary care offices, and includes the prototypical item: "Has anyone (friend, parent, teacher, or counselor) ever told you that they believe that you may have a drinking or drug problem?"

The *Rutgers Alcohol Problem Index (RAPI)*[90] consists of 23 items that address consequences of alcohol and other drug use related to psychological functioning, delinquency, social relations, family, physical problems and neuropsychological functioning. This measure has been found to correlate highly with *DSM–III–R* criteria for substance use disorders[91] (.75–.95).

The *Inventory of Drinking Situations (IDS)*[92] or the *Inventory of Drug Use Situations*[92] assesses the contextual aspects of alcohol or other drug use and provides information about relapse situations. This inventory consists of either 42 or 100 items (with eight subscales) to evaluate drinking/drug use situations, including unpleasant emotions, physical discomfort, pleasant emotions, testing personal control, urges and temptations, conflict with others, social pressures, and pleasant times with others.

The *Adolescent Diagnostic Interview (ADI)*[93] is a 15-minute evaluation used to assess the need for treatment of drug use among adolescents. This interview includes the evaluation of various cognitive, interpersonal, and school functioning factors that may contribute to alcohol or drug use. The instrument consists of 24 items. The *Personal Experience Inventory (PEI)*[94] is a comprehensive questionnaire used for detection of problem consequences and potential risk factors believed to predispose youth to use or maintain drug use. This 276-item questionnaire helps to quantify level of involvement with a variety of drugs and the severity of problems in personal, family, and psychosocial domains.

The *Adolescent Drug Abuse Diagnosis (ADAD)* is a comprehensive structured interview consisting of 150 items used to assess substance abuse and other problem areas. The format is adapted from the well-known adult tool,

the Addiction Severity Index (ASI).[95] This interview addresses nine life areas including medical, school, work, social relations, family relationships, legal, psychological, and alcohol and drug use.[96]

The *Comprehensive Addiction Severity Index for Adolescents (CASI-A)* is an instrument designed to provide an in-depth, comprehensive assessment of the severity of adolescents' addiction and problem consequences. This structured interview is also adapted from the Addiction Severity Index (ASI).[95] Ten domains are assessed, including psychological functioning, peer relationships, family history and relationships such as sexual and physical abuse, significant life changes, use of free time, substance use effects and treatment experiences, leisure activities, educational experiences and plans, legal history, and psychiatric status, including prior treatment experiences.[97]

The *Substance Abuse Subtle Screening Inventory (SASSI-A)* consists of 81 items and 10 scales (face-valid alcohol, face-valid other drugs, family-friends risk, attitudes, symptoms, obvious attributes, subtle attitudes, defensiveness, supplemental addiction measures, and correctional experiences). This measure takes about 15 minutes to complete. However, it is not clear that the different scales are measuring empirically separable phenomena, and the face-valid content measures show the best convergence with interview-based measures on substance use impairment.[98,99]

Other promising measures of alcohol or other drug abuse among teens includes the Global Appraisal of Individual Needs (GAIN),[100] Form 90 Timeline Followback (TLFB),[100] Perceived Benefits of Drinking and Reasons for Drug Use Scale,[101,102] Adolescent Drug Involvement Scale (adapted from the AAIS),[103] Adolescent Problem Severity Index (APSI),[104] the Juvenile Automated Substance Abuse Evaluation (JASAE),[105] and the Minnesota Multiphasic Personality Inventory-Adolescent.[40] For more information on adolescent substance use screening inventories, see http://www.testsymptomsathome.com/DSO01_screening_assessment_instruments.asp

Biochemical Assessment of Drug Use among Teens

Urine toxicology screening can play an important role in assessment and treatment of adolescents with substance use disorders. These tests provide validation of the accuracy of self-reported substance use when properly conducted and when the results are properly interpreted to minimize errors (e.g., false-positive or false-negative test results). Other reasons why biochemical assessment of drug use might be ordered among adolescents include early initiation of treatment, to rule out other possible illness or potential health problems, when individuals are brought into the emergency room, fair play in sports and

scholarship, and for proof of innocence in legal cases.[6] Positive test results for any substance are generally confirmed by a second test on the same urine sample using a different analytic method. Alternative, but more expensive, drug screening methods are hair, saliva, and blood analyses.

For initial drug use screening, the most commonly used tests are immunoassays (e.g., radioimmunoassay, enzyme immunoassay, and flourescence polarization immunoassay). Immunoassays involve the measurement of labeled and unlabeled antigen (drug or metabolite) and antibody interactions.[106] In drug testing, the antigen is a drug or metabolite; its corresponding labeled analog and the antibody is a protein grown in an animal and directed towards a specific drug, metabolite, or group of similar compounds. More selective screening assays used for confirmation include gas chromatography/mass spectrometry (GC/MS), gas chromatography (GC), and high-performance liquid chromatography (HPLC). Chromatography consists of a variety of techniques used to separate mixtures of drugs, their metabolites, and other chemicals into individual components based on differences in relative affinity for a mobile phase and a stationary phase.

PREVENTION AND TREATMENT OF ADOLESCENT SUBSTANCE ABUSE AND DEPENDENCE DISORDERS

Both prevention and cessation approaches encourage adoption of new, healthy behavior. However, the central focus of cessation work is on stopping a current behavior to arrest ongoing consequences and permit recovery of health, whereas the central focus of prevention work is on antecedents of the behavior, to anticipate and prevent future negative consequences from occurring. Cessation often deals with coping with psychological dependence on a drug and with physiological withdrawal. Prevention generally does not assist drug users through such hurdles. The choice between using a cessation or prevention approach is not always clear. There are high relapse rates in adult cessation programs; perhaps prevention might halt the addiction process that makes cessation so difficult. Alternatively, youth at highest risk may not benefit from prevention measures. They may only benefit when they perceive some costs occurring to them, making them appropriate candidates for early cessation efforts. This section will briefly discuss prevention efforts for youth and then more completely discuss what is known about youth cessation.

Prevention

An increasing number of prevention programs are developing specific strategies for altering risk factors (or enhancing protective conditions) empirically

demonstrated to be related to decreased drug use. Universal interventions, that is, prevention programming delivered to an entire population regardless of risk status, have been utilized most often. Targeted interventions, which are designed to tailor programming to those groups at higher psychosocial-based risk (selective) or individuals who have demonstrated to be at greatest risk of continued drug use behavior (indicated), have also been implemented, but relatively few such programs exist.[107]

Prevention modalities that have provided some evidence of effectiveness include school-based educational programs, family-based informational programs, community-based activities, and mass media campaigns. However, the most widespread prevention approaches are those implemented through the school system and designed to counteract the psychosocial influences that promote drug use initiation.[108] The two major psychosocial approaches used in schools are the social-influences approach[109] and more comprehensive personal- and social-skills-enhancement approaches (e.g., Life Skills Training,[110] Project Towards No Tobacco Use[111]). Social-influences programs are designed to increase the awareness of social factors that promote drug use, alter norms regarding the prevalence and acceptability of drug use, and build drug resistance skills. Skills-enhancement programs incorporate the social-influence approach and also include general self-management and social-competence skills.

Research on substance use prevention programs have indicated short-term (under 24 months) reductions in the rate of initiation of substance use generally ranging from 10 percent to 15 percent or more in students exposed to social-influences programs compared to control students.[108] A few targeted programs implemented with older high-risk teens have found 25 prevalence reductions in, for example, methamphetamine use lasting up to two years post-program.[107,112,113] These programs utilize a skill-enhancement approach and also incorporate motivation-enhancement material to effect changes in personal attitudes that may impede skill development and behavior change. Although much more research is necessary, a comprehensive substantive approach that utilizes multiple intervention modalities (school setting, community, mass media, etc.) may be most effective in controlling and preventing substance use initiation and escalation.

Treatment of Adolescent Substance Abuse and Dependence Disorders

Many adolescents may not receive or be helped by available prevention programming. Some may need formal treatment. Given the heterogeneous nature of substance use and the relative lack of adolescent treatment research to date,

it is not possible to recommend one specific treatment modality that is likely to be effective for all adolescent patients.[114] Instead, researchers and clinicians generally recommend the inclusion of specific treatment elements and a continuum of care in all treatment modalities (e.g., the *Quick Guide for Clinicians*[115]). Currently, several treatment modalities are available and have been utilized in the treatment of adolescent substance abuse and dependence. Most of these are based on adult treatment models; however, they typically include modifications to address the special needs of adolescents. This section provides a brief review of adolescent treatment issues (current status of treatment and youths' motivation for treatment), types of treatment, evaluation of treatment programs, potential further treatment options that may be effective when implemented among adolescents, and recovery and relapse prevention.

Effective Elements of Treatment for Adolescents

Beginning in the 1980s there was a dramatic increase in substance abuse treatment programs for youth. However, relatively few treatment effectiveness studies have been completed.[116] Of note, Brannigan and colleagues,[1] with assistance of a 22-member advisory panel, created a checklist of nine key elements of effective substance abuse treatment for adolescents. First, the panel agreed that programs should conduct comprehensive assessments that cover psychological and medical problems, learning disabilities, family functioning, and other aspects of youths' lives. Second, program services should address all aspects of the youths' lives (e.g., school, home, public activities). Third, parents should be involved in the youths' drug treatment. Fourth, the programming should reflect developmental differences between teens and adults. Fifth, treatment programs should build a climate of trust to maximally engage and retain teens in treatment. Sixth, staff should be well trained in adolescent development, comorbidity issues, and substance abuse. Seventh, programs should address the distinct needs of youth as a function of their gender and ethnicity. Eighth, programs should include information on continuing care (e.g., relapse prevention, aftercare plans, and follow-up). Finally, programs should include rigorous evaluations to measure success and improve treatment services.

Next, the researchers conducted in-depth telephone surveys of 144 broadly distributed (throughout the United States), highly regarded adolescent substance abuse treatment programs to determine the extent to which available programs met the criteria. Results indicated that the best programs were not more likely to be accredited, but were more likely to be 20 years old or older and to involve family therapy and a therapeutic community approach. Only approximately 19 percent of the treatment programs provided adequate

comprehensive assessment, 33 percent provided adequate comprehensive treatment, 34 percent emphasized adequate family involvement, 44 percent adequately considered developmental appropriateness, 25 percent adequately established means that could encourage good retention, 54 percent reported adequately qualified staff, 10 percent adequately considered gender and cultural sensitivity, 39 percent adequately considered continuing care, and 6 percent adequately addressed process and outcomes evaluation.[1] One might infer that most treatment provided to adolescents nowadays is far from ideal.

Youths' Motivation to Receive Treatment

Not only are many treatment programs far from ideal; youth may not be motivated to enter or remain in treatment regardless of the type of treatment facility.[19] For example, among 600 teens entering outpatient treatment primarily for marijuana abuse and dependence at facilities located in four urban U.S. locations, only 20 percent stated that they needed help for their problems associated with alcohol or drug abuse.[117] Thus, motivating youth to obtain assistance and stay in treatment is a difficult task, because most of them may not feel they need any formalized treatment.

Likewise, Weiner et al.[118] utilized both open-ended and multiple-choice surveys, as well as health educator–led focus groups, to assess issues relating to marijuana use and cessation among a population of high-risk youth. A total of 806 students participated, assessed as two separate samples from 21 continuation (alternative) high schools in southern California. Approximately 70 percent of the students were current marijuana users. Over half of the marijuana users surveyed had tried to quit and failed. Still, social images associated with marijuana smokers were predominantly positive, and subjects expressed a lack of confidence in the efficacy of marijuana cessation clinic programs. "Quit in private, on your own, without any policies" received the highest mean rating for effectiveness out of a list of ten different cessation strategies. Other highly rated methods of marijuana cessation were either restrictive or punitive. "Inpatient stay" received the second-highest mean effectiveness rating and "jail time" the third-highest effectiveness rating. "Fines" and "driver's license suspension" received the fourth- and fifth-highest effectiveness ratings, respectively. Thus, subjects believed that self-help and restrictive or punitive methods are the most effective types of marijuana cessation activities. Minors can consent to their own treatment in most states without parental notification, and perhaps providing awareness of and emphasizing confidentiality of treatment could help motivate more youth to seek help.[119] Based on available research reported below, it does appear to be the case that treatment (of some kind) for substance abuse is superior to no treatment, and that aftercare services are important.[20]

Current Treatment Modalities for Adolescents

There have been four primary treatment models used with adolescents: (1) the Minnesota Model, which is based on the 12 steps of Alcoholics Anonymous (AA);[120] (2) the therapeutic community (TC) model; (3) family therapy; and (4) cognitive-behavioral therapy.[20] The Minnesota Model emphasizes the following: inpatient or residential care for a few weeks or months; a focus on psychoactive substance use disorder with little attention directed to associated psychiatric conditions or individual psychosocial factors; use of AA concepts, resources, and precepts, including the 12 steps central to recovery; referral to self-help groups such as AA upon discharge from residential or inpatient care, with limited or no ongoing professional treatment; provision of limited family therapy, although the family may be oriented to AA principles and Al-Anon; and nonacceptance of psychotherapy and pharmacology for either substance abuse or psychiatric disorder. Traditionally, counselors have been recovering alcoholics or addicts, though now professional staff have been added to the related treatment facilities, and attention to dual diagnosis and other issues is increasing.[20]

In the therapeutic community (TC) group model, the community serves as the primary therapist. While the client may have a primary counselor, all members of the community have the responsibility to act as therapists and teachers. Nearly all activities are part of the therapeutic process. Peer-group meetings are often led by a peer. Clients are provided with increased responsibilities and privileges as they pass through structured phases of treatment within the TC. One-on-one counseling, remedial education, and occupational training also are provided.[20] Modification of the TC model for teens includes use of shorter stays, participation by families, limited use of peer pressure, and less reliance on use of life experiences to foster self-understanding.[120]

Family therapy tends to view alcohol and drug abuse as a family (systems) problem. Family relationships are viewed as problematic and family boundaries are viewed as distorted. Family therapy with professional staff is the main treatment modality,[20] although therapies that involve specific training for parents and the teen substance abuser also have been developed.[107] Some prevalent family-based treatments in the teen substance abuse disorder treatment literature include Structural Strategic Family Therapy (SSFT), Multidimensional Family Therapy (MDFT), and Multisystemic Family Therapy (MST). In general, these treatments attempt to involve all family members, improve parent-child communication, and provide skills training for parents (child management practices: limit setting, appropriate parent behavior) and youths (appropriate role as a teen[40,121]).

Behavioral and cognitive-behavioral approaches seek at least three goals. First, they aim to decrease the frequency of behaviors compatible with drug

use and increase the frequency of behaviors incompatible with drug use. Second, they aim to shape new adaptive behaviors (e.g., social skills development). Finally, they aim to appropriately modify cognition (i.e., decrease the frequency of cognition compatible with drug use and increase the frequency of cognition incompatible with drug use). Training new behaviors can be accomplished through use of shaping, modeling or observational learning, role playing, and assertiveness training. Further, modifying one's thinking or inner speech can be accomplished through using strategies such as self-instructional training and cognitive restructuring.[122] Other thought-modification strategies include self-verbalizations, positive affirmations, thought stopping, rehearsal and imaging.[122] Cognitive-behavioral approaches such as social-control contracting, emotional-regulation training and anger management, social and environmental support seeking, problem solving, coping skills training, environmental resource–acquisition skills, and relapse prevention also ideally would be taught.[40]

A few other modalities have also begun to be used with teens. These include emphasis on group therapy and pharmacotherapy. Group therapy provides a means for youth to provide corrective feedback to each other and is less expensive than individual therapy. On the other hand, the potential for peer deviancy modeling could result by group participation.[19] Group therapy, with other clients and/or the family, provides peer support, feedback, and confrontation, guided by a trained leader. In-depth attention on psychological issues that might occur in group therapy is relatively unlikely to occur in self-help groups. In early recovery, the therapist serves as a coach and a monitor. As recovery progresses, the therapist helps group members resolve issues of trauma and learn intimacy with others, as well as learn how to express feelings appropriately.

Kaminer[123] discusses the option of using pharmacotherapy with teens, just as it has been used with adults. Possibly, medication might help ease potential withdrawal symptoms, and might help in mood stabilization after quitting alcohol or other drugs. There has been very little research on the safety of using pharmacotherapy among teens.[124] Studies on use of pharmacologic adjuncts to assist with tobacco use cessation have not been promising thus far as applied to teens.[112] Desipramine (a tricylclic antidepressant) has been used to treat cocaine dependence in a few case studies with mixed results.[123] Additionally, little evidence exists for the efficacy of drug-related medications for teens such as use of methadone and naltrexone during detoxification.[40] However, while there is some debate, use of selective serotonin reuptake inhibitors (SSRIs) or selective norepinephrine reuptake inhibitors (SNRIs) is recommended for those young patients who are highly depressed or anxious. Medications for Attention Deficit and Hyperactivity Disorder (ADHD), including Ritalin, could be abused but generally are not by prescribed users (some do provide

these medications to their friends). Medications for ADHD with less potential for abuse are being developed. The future of the use of medications with teens is not clear, and ethical concerns exist with this special population, including consideration of parental rights and child rights, potential interference of the rapidly developing brain of the young person, and limited life experience that might preclude giving fully informed consent regarding use of a medication, that limit experimentation in this arena.[123]

Treatment Program Evaluations and Contrasts

There are several types of treatments for teens that have been tested for therapeutic change and/or contrasted recently. Kaminer, Burleson, and Goldberger[125] compared the efficacy of group cognitive-behavioral therapy versus group psychoeducational therapy for 88 adolescents who were randomized into two 8-week outpatient conditions. Subjects in the cognitive-behavioral therapy condition reported significantly lower relapse rates compared to those subjects in the psychoeducational therapy condition at three-months follow-up. However, cognitive-behavioral therapy subjects failed to report significant improvements in relapse rates compared to the psychoeducational therapy at nine months post-treatment. This loss of differential short-term gains of cognitive-behavioral therapy compared with psychoeducational therapy is similar to findings reported in another study.[126]

Battjes et al.[127] found that 194 youth who attended a structured, outpatient, group-based treatment program reported a decreased level of marijuana use but not alcohol use up to 12 months post-entry into treatment. Liddle et al.[128] contrasted outpatient peer group therapy with family-based treatment (MDFT) among 80 low-income, urban youth and found the family therapy to be superior over the course of treatment.

In several recent studies, family-based teen substance abuse treatment has been found to lead to greater recruitment and retention than other modalities.[129] It is less clear if family-based treatment is superior in behavioral outcomes to other treatments. An outpatient combined cognitive-behavioral group therapy and family therapy program (Family and Coping Skills, or FACS; 3-month duration) for treatment of substance abuse and depression was found to be feasible and was associated with improvement in mood and substance abuse–related behavior (for marijuana, not alcohol) the week following treatment among a sample of 13 teens.[130] A similar pattern of results was found in a randomized clinical trial involving 114 teens.[129] At four months follow-up, a significant reduction in marijuana use was found in the combined treatment and functional family therapy condition. At seven months follow-up, the

combined treatment and psychoeducational group therapy were relatively effective. Thus, a combined/comprehensive approach in treatment appears to work better than family or group approaches. The latter two approaches show equivocal relative effects on behavior.

Weekly or twice-a-week individual outpatient treatment, which includes psychoeducation and instruction in use of decision making, has been found to be associated with improvement of depression and anxiety-related symptoms eight weeks later among 129 teen substance abusers.[55] Dasinger, Shane, and Martinovich[131] evaluated a variety of treatment models and found that programs that involved placing teens in long-term residential care showed the greatest magnitude in drug use reduction but with the highest relapse rates. Regarding types of patients, one study of 187 teens revealed that those teens with a history of victimization show better outcomes in residential care than as outpatients.[132]

Cultural Sensitivity and Treatment

Ethnic, gender, and drug use history differences have been found between involvement in residential (inpatient) and outpatient modalities of treatment. As reported by Rounds-Bryant, Kristiansen, and Hubbard[133] in a survey conducted from 1993 through 1995 of 3,382 subjects from six nationally dispersed urban areas, residential patients tended to be male, African-American or Hispanic, and had often been referred by the juvenile or criminal justice system. Outpatients reported the least criminally involved lifestyles, lowest levels of drug use, and least drug treatment experience. Very little quantitative empirical work on cultural sensitivity has been completed in the teen substance abuse treatment arena. However, research has shown that cultural factors should be considered in, for example, treatment placement decisions. A study conducted by Dinges and colleagues[134] found that Native American adolescents showed intense emotional strain, which can be counterproductive to treatment, when removed from their family for inpatient setting treatment. Thus, for some youth, it may be advantageous to ensure that family bonds are not disrupted by out-of-home placement.. Instead, such youth may be better served through a more intensive outpatient setting; if inpatient treatment is deemed more appropriate, it should be accompanied by frequent family contact and support.

Summary of Contrast Studies of Different Treatment Programs

Generally, improvements were found for those who remained in treatment, regardless of type of treatment, although numerous methodological flaws in the

study designs were present. Some noted methodological flaws included small sample sizes, lack of placebo-type control groups, lack of random assignment to conditions, insufficient descriptions of treatments or facilitators, inadequate follow-up of dropouts, and lack of biochemical validation.[121,125, 135]

The first randomized trial to provide follow-up data beyond 12 months was completed by Henggeller and colleagues[136] in their evaluation of Multisystemic Therapy (MST) at a four-year follow-up among juvenile offenders (80 of 118 youth that had been randomly assigned to MST or usual community services). Effects were maintained for aggressive criminal activity but not for property crimes, and an effect was apparent for marijuana abstinence.

Consideration of Other Treatment Options

Reach of Programming

Reaching young substance abusers in multiple settings has been suggested as being potentially very important to strengthen treatment for youth. There are many examples of means of providing treatment for youth in community settings. Two examples are student assistance programs in schools and physician assistance. Student assistance generally is available first through a contact with someone at the school, perhaps a teacher, the security guard, other students, or the school nurse. Typically, there may be around five hours of in-service training for staff and peer counselors regarding addiction, how to recognize drug problems, and referral skills. Peer counselors may lead education groups that teach coping skills and values development. Peer support groups may also be available for youths who are struggling to get and stay sober. Usually these groups also provide referral information and take a 12-step, group-support model approach. Finally, sometimes a resource library and peer advising are available.[137]

Primary care physicians can learn to screen for problems and refer youth to drug and mental health counseling.[138] In addition, they can be trained as agents of outpatient treatment,[139] particularly if minimal programming can be used. There is very little research completed on using the physician as a point of contact or as a treatment agent for teen drug abuse; however such work has begun.

When dealing with extreme populations such as runaway youth, screening for drug abuse is more difficult because these youth are relatively unlikely to have contact with traditional systems of care. Public health care facilities often screen for drug abuse among teens as part of all standard care. In addition, stabilization of living situations for homeless youth is very important (e.g., easy access to housing shelters and outreach) to be able to draw these youth into treatment.[140]

Aftercare Self-Help Programming

Twelve-step programs that include groups for young people pro-
vide another promising modality to help teens maintain sobriety (e.g., an
Internet search conducted June 7, 2005, yielded 250 links for young peo-
ple in Alcoholics Anonymous). Twelve-step programs such as Alcoholics
Anonymous (AA) and Narcotics Anonymous (NA) are abstinence-oriented,
multidimensional, nonprofit, humanistic, voluntary, supportive, self-help
fellowships for individuals for whom drug use is problematic. All of the
12-step, sobriety-based programs are based on a disease model of addiction
and require complete abstinence from all drugs except cigarettes (nicotine)
and coffee (caffeine).

The essential principle of these 12-step programs is that a recovering alco-
holic or drug abuser can altruistically and effectively help a fellow addict to gain
or maintain sobriety. Members openly talk about their struggles and successes
and develop problem-solving skills, as well as friendships with others, com-
forted in the knowledge that they are not alone in their plight. An important
adjunct to the program is self-selecting a sponsor who provides support and
helps to guide the individual in the program.[6]

At present, approximately 9 percent of the members of AA are 21 to 30
years old and only 2 percent are under 21 years old.[141] Admitting to a sense of
powerlessness, a key principle of 12-step programs, may conflict with teens'
search for autonomy as can perceiving themselves as having to remain absti-
nent (perceiving themselves as having "hit bottom[55]"); both are thus poten-
tial barriers to participating in a 12-step program. Treatment for teens needs
to grapple with the tendency to engage in a great deal of limit-testing.[142]
However, attendance at 12-step meetings specifically for teens has been found
to predict better outcomes. These outcomes are mediated by motivation but
not coping.[143]

Many drug abusers (alcoholics and addicts) may best regain control of their
lives through a program that does not require moral betterment or belief in
a higher power to gain sobriety. Some individuals do not want to feel pow-
erless or dependent upon others, or to attend meetings for the rest of their
lives. Other self-help treatment alternatives to AA include Rational Recovery,
SMART Recovery, and Secular Organizations for Sobriety.[6] Use of these
programs with teens is not yet prevalent.

Motivational Interviewing

Motivational Interviewing has been considered for use with teens, par-
ticularly because of its potential to be delivered as a brief intervention.[144]

Motivational Interviewing[145] is based on principles of cognitive therapy, Carl Rogers's client-centered approach, and the Transtheoretical Model. It involves a series of procedures for therapists to help clients clarify goals and follow through with their efforts to change behavior. Motivation is conceptualized as the probability that a person will enter into, continue, and adhere to a specific change strategy.[146] Motivation for change fluctuates over time, and *addressing this ambivalence* is considered a key for facilitating behavioral change. Motivational Interviewing involves eight strategies to motivate behavior change. One is *giving advice*, which entails identification of the problem, clarification of the need for change, and encouraging the specific change. A second is *removing impediments to change* through problem identification, effective problem solving and cognitive restructuring. A third is *providing choices*. A fourth is *decreasing desirability (of not changing)* by promoting benefits of behavior change. A fifth is providing *empathy*, which is marked by warmth and understanding. A sixth is *providing accurate feedback* of one's behavior and outcomes to aid in altering or modifying risky behaviors. A seventh is *clarifying goals by* confronting the individual about discrepancies between future goals and the present situation. Finally, an eighth is *supporting the development of self-efficacy (active helping)*. Motivational Interviewing may prove a valuable brief treatment option for teens, although current data suggest its advantage over no treatment or other modalities in only approximately 30 percent of the studies in which it has been examined.[144]

Relapse and Recovery

Recovery from substance abuse is widely known to be extremely difficult, even with exceptional treatment resources. For example, although relapse rates are difficult to accurately obtain, it has been reported that, among adults, 70 percent of alcohol-dependent users experience at least one relapse within four years after treatment. Similar relapse rates for heroin, nicotine, and marijuana users have also been documented.[6] As with other chronic illnesses, relapses to drug use can occur during or after successful treatment episodes. Recovering individuals may require prolonged treatment and multiple episodes of treatment to achieve long-term abstinence.

Relapses are most likely to occur within the first 12 months of the discontinuance of substance use. Relapses may be triggered by a number of life stressors (e.g., divorce, death of a loved one, loss of job or income, periods of illness or poverty), or to a seemingly ordinary exposure to a person or place associated with previous substance use. It is believed that two primary factors may play a key role in protecting against relapse, the development of adaptive life skills and ongoing drug-free social support, such as that found in 12-step

programs. In fact, a meta-analysis study of adults that investigated the relationship between long-term sobriety and AA attendance and involvement found positive outcome effects.[147] Another potentially important protective factor is social support for the individual in recovery. Ongoing therapy and social support assistance for family members is also recommended because substance dependence has a serious impact on family functioning, and because family members may inadvertently maintain behaviors that initially tolerated or supported the substance use behavior.

FUTURE DIRECTIONS IN ADOLESCENT SUBSTANCE ABUSE TREATMENT

The above sections of this chapter suggest that much more research on adolescent substance abuse is needed, including its natural history, epidemiology, etiology, assessment, prevention, and treatment. Because existing treatment strategies have shown modest outcomes at best, a very immediate need exists to develop and test *newer* forms of psychosocial treatment.

A Consideration of Youth Development

One very important, yet relatively untapped, area for treatment research focuses on the developmental changes occurring between early adolescence and young adulthood (from approximately age 16 to 25), when new challenges, pressures, and responsibilities increase as individuals transition into independent, adult roles. Although substance dependence can begin at any age, individuals from 18 to 24 have relatively high substance use rates, and substance use dependence often arises sometime during the ages of 20 to 49. Treatment of substance use disorders among young people must be designed to reflect their unique developmental needs.

Treatment providers should continue to address and emphasize issues that play significant roles in adolescent development, such as cognitive, emotional, physical, social, moral, and career development, as well as family and peer environment factors. Those teens who abuse drugs are relatively unlikely to experience normative developmental trajectories. They may experience truncated development (taking on tasks before they are ready) or childhood dependence (not learning skills of independence).

Accordingly, there is a need to understand some of the developmental challenges spanning this entire transitional period, which can lead to or be affected by drug use. During young adolescence, youth begin to place a greater importance on their peers relative to their parents and primary family members (e.g., brothers and sisters). They tend to experiment with new behaviors

in the context of a group of three to eight same-sex peers, as opposed to one-on-one interactions. Dynamic social changes occur between early adolescence (junior high school) and later adolescence (high school). In later adolescence, youth spend more time away from adults, and their lives become less dominated by social interactions with these small groups of same-sexed peer groups. Concomitantly, they become exposed to a wider range of interactions with crowds in unsupervised social gatherings, more dyadic relationships such as dating, and more weak ties (liaisons) than in earlier years.[148–150] Older teens begin to experience new challenges (e.g., jobs, team sports, unsupervised recreational time). Perhaps, as individuals grow closer in age to adulthood, their peers place more and more direct pressure on them to show autonomy or to hurry into adult-like roles.[151]

Emerging adulthood (approximately 16 to 25 years) is characterized by the general goal of developing a stable, sustained identity as an adult within an environmental context that tends to be rapidly changing in its demands on the individual.[152] This is a period in which young people tend to move away from dependence on caretakers toward self-sufficiency, as a transitional period prior to taking on the obligations to others that structure adult life for most people. The age at which this self-care transition actually occurs may vary as a function of life circumstances. Youth in relatively deviant life trajectories tend to reach a period of relative independence at younger ages than others.[2] There may be an expectation of many life possibilities, but with this optimism is a sense of being "in-between" and capable of becoming trapped in an undesired life role. Most emerging adults will move out of the parents' home, generally more than once, and take a job to obtain independence. They are relatively likely to live alone. They tend to go in and out of additional school or vocational training. Main developmental tasks appear to be learning to accept responsibility for oneself, making independent decisions, and becoming financially independent. One considers what type of person one wants to have as a partner, what type of person one views oneself as, and what type of careers one can realistically take on.[152] Not surprisingly, this is the age range in which people are at highest risk for drug abuse.

Young people leaving high school are expected to seek new opportunities.[152, 153] These may include: (1) assuming career avenues and financial independence, (2) learning skills of independent living (e.g., buying or renting a place to live apart from one's parents),[153] (3) growth in self-care skills (e.g., cooking, cleaning, grooming, buying goods, traveling), and (4) social adventures (e.g., love and young adult groups). Social adventures lead eventually to commitment in relationships (e.g., marriage and children). Relatively high levels of family conflict in adolescence may diminish in

emerging adulthood, as the individual achieves an emotional distance from parental demands and begins to associate more as a junior peer.[154]

One may argue that youth enter a protracted life phase. Within this phase, there is a trade-off between commitments and new areas of exploration that must be abandoned. For example, getting married would tend to preclude further dating. Beginning a full-time job would tend to preclude taking on another full-time job with a different directional emphasis. Events characteristic of young and middle adulthood, such as taking on the role of a parent, economic provider, and nurturer, leads to new experiences but often in sacrifice for others, and also leads to increasing law abidance, diligence, and conservatism.[155]

Youth who receive parental support, are academically and socially competent, are strongly bonded to school, attend church, and hold normatively popular attitudes are relatively likely to transition smoothly into normatively defined young adult roles.[156–159] Normatively popular attitudes include such sentiments as valuing one's health, affirming the importance of hard work, and expressing respect of family. On the other hand, youth that exhibit unconventional behavior (e.g., cheating, having a child out of wedlock), unconventional attitudes (e.g., tolerance of deviance and preference for sensation seeking), poor emotional control, anger, intrapsychic distress, and interpersonal difficulty are relatively likely to use drugs in emerging adulthood.[154,160] These youth tend to enter adult roles early ("precocious development"), before they are really prepared to take them on. They tend to drop out of high school or attend part-time, get married and quickly divorced, have children while relatively young, and take on relatively undesired full-time employment. Those teens who exhibit precocious development are at particularly high risk for drug use in emerging adulthood.[158]

Successful marriage (often forestalled until later in emerging adulthood) is inversely related to drug use, possibly because social opportunities to use decrease, and relationship commitment and consideration of the other person may reduce one's desire to use. This effect applies to males and females, though more strongly for females. Pregnancy and parenthood, in the context of happy marital relationships, are statuses that are also inversely related to drug use. On the other hand, cohabitation, which is relatively strongly associated with holding nontraditional beliefs, is positively associated with drug use. Job stability in young adulthood is negatively related to drug use, although participation in the military or in hourly jobs may be relatively strongly associated with use of cigarettes and alcohol.[153]

Another major predictor of drug use in emerging adulthood is drug use in adolescence.[156] The stability of cigarette smoking from high school graduation over the next 10 years is very high, is moderately high for alcohol and marijuana

use, but decreases dramatically for other illicit substance use.[153,161] Finally, age is a major curvilinear predictor of drug use. Experimental drug use tends to peak during this period of emerging adulthood,[153] and then tends to decline later in young adulthood (around 25 years of age).

Treatment programs focusing on emerging adulthood must not only acknowledge the features of emerging adulthood (e.g., increased exploration of various experiences), but also must link these features to feasible strategies of treatment (e.g., enhancing prosocial skills). Relevant strategies include addressing the tangible needs of emerging adults, such as employment, housing, education, parenting resources, family counseling, transportation, recreation, and dental/medical care. In fact, research has shown that the best predictors of successful substance abuse treatment are gainful employment, adequate family support, and lack of coexisting mental illness.[162] Optimally, new treatment programs will not only focus on the addiction but also consider integrating substance abuse treatment with, for example, vocational services.

A Consideration of Integrated and Matched Treatment Programs

Future treatment research should also be directed at developing interventions tailored to adolescents with co-occurring substance use and mental disorders, because these disorders often coexist in the same individual. However, to date, substance abuse treatment researchers have sought to develop an understanding of the treatment of single psychiatric conditions, and have virtually failed to incorporate treatment of co-occurring problems.

It is likely that there would be a greater yield from treating adolescents diagnosed with a substance use disorder and a co-occurring mental disorder using treatment that follows an integrated protocol addressing both conditions.[163,164] Adolescents may find it difficult to adhere to parallel or sequential treatments in separate substance abuse and mental health systems, thus compromising the effectiveness of treatment.[165]

An integrated treatment approach would allow continuous attention to both problems, a synthesis of treatment principles, and prioritization of treatment goals.[165] Furthermore, studies of integrated treatments would help to bridge the gap between the substance use and mental health treatment literatures, which has the potential to produce better outcomes among adolescents than either treatment alone.

Gender, age, socioeconomic, and cultural background factors also need much more investigation, as these factors may suggest a need to match treatment to young clients with different needs to maximize effects on their behavior.

Regarding comorbid conditions or variations in social-environmental contexts, data on patient-treatment matching would aid in designing the most efficient treatment programs for groups of persons.

Conclusions

Much more work is needed to advance knowledge in the arena of adolescent substance abuse and dependence. Most notably, treatment strategies remain relatively underdeveloped in relation to other areas of medicine, and among older populations. As indicated in this chapter, it appears that no single treatment is likely to be appropriate and effective for all adolescents. Still, to the best of our knowledge, all treatment programs should include some type of continuing care or self-care regimen. One may speculate that treatment programs should include a programming component that encourages adolescents to form attachments with prosocial, non-drug abusing people in their community, and assist them in finding leadership or service opportunities that enable them to contribute to their community. Ideally, the treatment intervention, along with treatment setting and services, should be matched to the particular problems and needs of the individual, and some means of attaching the individual to his or her community after treatment, and helping him or her to maintain sobriety, is essential.

Future directions in treatment research must continue to target the development, implementation, evaluation, and diffusion of evidence-based adolescent substance abuse programming. Most importantly, use of empirical program development methods will assist in constructing programming that is needed.[165] Input from those in treatment (particularly among those participating in the natural support systems within the recovery movement), pilot studies, and consideration of mechanisms of lifestyle change will provide the ingredients for the development of effective treatment programming. Further, the knowledge gained from this research should be utilized to develop guidelines and public health policies that will prevent the development of adolescent substance use disorders.

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Workaholism

Ronald J. Burke

This review examines the literature on workaholism in organizations. Workaholism is acknowledged to be a stable individual characteristic, although how it is distinguished from other characteristics is often unclear.[1] The review addresses the following areas: definitions of workaholism, measures of workaholism, the prevalence of workaholism, types of workaholics, validating job behaviors, antecedents of workaholism, work consequences, health consequences, extrawork satisfactions and family functioning, evaluating workaholism components, possible gender differences, reducing workaholism, and future research directions.

Although the popular press has paid considerable attention to workaholism,[2–9] very little research has been undertaken to further our understanding of it. Most writing has been anecdotal and clinical;[2,6,10,11] basic questions of definition have not been addressed and measurement concerns have been avoided.[12]

It should come as no surprise, then, that opinions, observations, and conclusions about workaholism are both varied and conflicting. Some writers view workaholism positively from an organizational perspective.[8,12–14] Machlowitz[8] conducted a qualitative interview study of 100 workaholics and found them to be very satisfied and productive. Others view workaholism negatively.[6,10,11] These writers equate workaholism with other addictions and depict workaholics as unhappy, obsessive, tragic figures who are not performing their jobs well and are creating difficulties for their coworkers.[10,15,16] The former would advocate the encouragement of workaholism; the latter would discourage it.

DEFINITIONS OF WORKAHOLISM

Research on workaholism has been hindered by the absence of acceptable definitions and measures.[12] Mosier defined workaholism in terms of hours worked; workaholics were those who worked at least 50 hours per week.[17] Cherrington sees workaholism as "an irrational commitment to excessive work.[18] Workaholics are unable to take time off or to comfortably divert their interests" (p. 257). Machlowitz defines workaholics as people "who always devote more time and thoughts to their work than the situation demands … what sets workaholics apart from other workers is their attitude toward work, not the number of hours they work" (p. 11).[8] Killinger defines a workaholic as "a person who gradually becomes emotionally crippled and addicted to control and power in a compulsive drive to gain approval and success" (p. 6).[6] Robinson defines workaholism "as a progressive, potentially fatal disorder, characterized by self-imposed demands, compulsive overworking, inability to regulate work habits and an over-indulgence in work to the exclusion of most other life activities" (p. 81).[19]

Oates, generally acknowledged as the first person to use the word *workaholic*, defined it as "a person whose need for work has become so excessive that it creates noticeable disturbance or interference with his bodily health, personal happiness, and interpersonal relationships, and with his smooth social functioning" (p.4).[10] Porter defines workaholism as "an excessive involvement with work evidenced by neglect in other areas of life and based on internal motives of behavior maintenance rather than requirements of the job or organization" (p. 71).[16]

Scott, Moore, and Miceli used a three-step process to develop what they term a reasonable definition of the construct.[12] They first collected characteristics attributed to workaholics in the practical and clinical literature. They then looked for conceptual similarities among these characteristics. They also differentiated the workaholic concept from similar constructs (e.g., job involvement) to reduce redundancy. They identified three elements in workaholic behavior patterns using this process: discretionary time spent in work activities, thinking about work when not working, and working beyond organizational requirements.

Spence and Robbins were the first researchers to define workaholism.[20] They define the workaholic as a person who "is highly work involved, feels compelled or driven to work because of inner pressures, and is low in enjoyment at work" (p. 62). Most writers view workaholism as a stable individual characteristic.[12,20] In addition, most definitions of workaholism have negative connotations. Finally, most writers use the terms *excessive work*, *workaholism*, and *work addiction* interchangeably.

Despite these broad and varying definitions, a compelling case could be made for devoting more research attention to workaholism. There have

been suggestions that workaholism may be increasing in North America.[2,21] It is not clear whether workaholism actually has positive or negative organizational consequences.[6,8] There is also debate on the association of workaholic behaviors with a variety of personal well-being indicators, such as psychological and physical health and self-esteem. Finally, different types of workaholic behavior patterns likely exist, each having unique antecedents and outcomes. The question of whether workaholism can, or should be, reduced has also been raised.[6,16,22]

MEASURES OF WORKAHOLISM

Some writers have developed measures of workaholism,[2,6,8,20,23,24,25] but with the exception of Robinson and Spence and Robbins, most were not based on a clear definition of workaholism, nor do they provide psychometric information on the measure and its validity.[19,20]

A number of measures of workaholism have been reported in both the popular and academic literatures. Many of these are listings of behaviors in checklist form, are used once, and are never validated. Machlowitz lists 10 characteristics (e.g., "Do you get up early, no matter how late you go to bed?") in a yes/no format.[8] She writes that if a person answers yes to eight or more questions, the person may be a workaholic. Doerfler and Kammer used this measure in a study of male and female attorneys, physicians, and psychologists.[25] Killinger lists 30 items in her workaholic quiz (e.g., "Do you think you are special or different from other people?"), also answered in a yes/no format.[6] She suggests that 20 or more yes answers indicate the respondent is likely a workaholic. There is no information about where these items came from nor any psychometric information about the properties of these two scales.

Two other measures of workaholism have been developed and reported along with information of some of each measure's properties.[19,20] Robinson and his colleagues developed the Work Addiction Risk Test (WART). WART contains 25 items drawn from symptoms (characteristics) reported by writers on workaholism.[26] Respondents rate items on a four-point Likert scale (1 = Never true, 4 = Always true) according to how well each item describes their work habits (e.g., "It's important that I see the concrete results of what I do"). Scores can range from 25 to 100. Robinson states that scores of 25 to 56 indicate that a respondent is not work addicted, scores from 57 to 66, mildly work addicted, and scores from 67 to 100, highly work addicted.[19] Scores above 65 fall greater than one standard deviation above the mean. The items on WART, based on a review of available literature, were grouped into

five categories: overdoing, self-worth, control–perfectionism, intimacy, and preoccupation-future reference.

Robinson and his colleagues report a number of short studies providing psychometric information for WART. They indicate a test-retest reliability over a two-week period in a sample of 151 university students of .83, with a coefficient alpha of .85.[27] Robinson and Post reported a split-half reliablities in three data sets:169 college students, 106 graduate students, and 194 members of Workaholics Anonymous.[28] Based on 442 respondents, a Spearman-Brown split-half coefficient of .85 was obtained.

Face validity was determined by having 50 working adults place each of the 25 WART items into one of the five broader categories (e.g., overdoing). On average, the 25 items were correctly allocated to the five umbrella categories by 70 percent of these graduate students.[29]

Robinson tested the criterion-related validity of WART, again in sample of students, by correlating WART scores with measures of Type-A behavior and anxiety.[30] Comparing high, medium, and low WART scorers showed that students scoring higher on WART also scored higher on anxiety and some Type-A components. These findings are not surprising given the conceptual and content overlap between WART and the two criterion measures.

Spence and Robbins report the development of their workaholism measure, providing both reliability and concurrent validity information.[20] Based on their definition of workaholism, developed from a review of the literature, they prepose three workaholism components: work involvement, feeling driven to the work, and work enjoyment. They developed multi-item measures of these components, each having internal consistency reliabilities greater than .67 in a study of 368 social workers holding academic appointments.

PREVALENCE OF WORKAHOLISM

Not surprisingly, given the varied and ambiguous nature of workaholism definitions, estimates of the prevalance of workaholics vary. Machlowitz estimated that 5 percent of the U.S. population were workaholics.[8] Doerfler and Kammer, using Macholwitz's measure, reported that 23 percent of their sample of physicians, lawyers, and psychiatrists/therapists were workaholics.[25] Kanai, Wakabayashi, and Fling, in a large Japanese sample consisting primarily of managers, found that about 21 percent fell into the Spence and Robbins Work Addict profile.[31] Spence and Robbins reported, in a sample of professors of social work, that 8 percent of men and 13 percent of women fell into their Work Addict profile.[20] Elder and Spence (unpublished manuscript), based on a sample of MBA graduates in the United States, observed percentages falling

into workaholism profiles similar to those noted in the earlier (1992) Spence and Robbins study.[31]

TYPES OF WORKAHOLICS

Some researchers have proposed the existence of different types of workaholic behavior patterns, each having potentially different antecedents and associations with job performance and work and life outcomes.[12,15,20] Naughton presents a typology of workaholism based on the dimensions of career commitment and obsession-compulsion.[15] Job-involved workaholics (high work commitment, low obsession-compulsion) are hypothesized to perform well in demanding jobs, be highly job satisfied with low interest in nonwork activities Compulsive workaholics (high work commitment, high obsession-compulsion) are hypothesized to be potentially poor performers (staff problems resulting from impatience and ritualized work habits). Nonworkaholics (low work commitment and obsession-compulsion) spend more time on nonwork commitments. Compulsive nonworkaholics (low work commitment, high obsession-compulsion) compulsively spend time in nonwork activities.

Scott, Moore, and Miceli suggest three types of workaholic behavior patterns: compulsive-dependent, perfectionist, and achievement-oriented.[12] They hypothesize that compulsive-dependent workaholism will be positively related to levels of anxiety, stress, and physical and psychological problems, and negatively related to job performance and job and life satisfaction. Perfectionist workaholism will be positively related to levels of stress, physical and psychological problems, hostile interpersonal relationships, low job satisfaction and performance, and voluntary turnover and absenteeism. Finally, achievement-oriented workaholism will be positively related to physical and psychological health, job and life satisfaction, job performance, low voluntary turnover, and prosocial behaviors.

Spence and Robbins, using profile analysis, identified three workaholic types based on their workaholic triad notion.[20] The workaholic triad consists of three concepts: work involvement, feeling driven to work, and work enjoyment. Work Addicts (WAs) score high on work involvement and feeling driven to work and low on work enjoyment. Work Enthusiasts (WEs) score high on work involvement and work enjoyment and low on feeling driven to work. Enthusiastic Addicts (EAs) score high on all three components. Three other studies using the same three scales have produced essentially the same profiles.[31,32,33] These researchers offer a number of hypotheses as to how these three workaholic patterns might differ from each other. Thus, WAs would be more perfectionistic, would experience greater stress, and would report more physical health

symptoms. The existence of different types of workaholic patterns might help reconcile the conflicting observations and conclusions cited above.

Oates identified five types of workaholics: dyed-in-the-wool workaholics, converted workaholics, situational workaholics, pseudoworkaholics, and escapists posing as workaholics.[10] Fassel described four types of workaholics: compulsive workers, binge workers, closet workers, and work anorexics.[2] Robinson distinguished four types of workaholics: relentless workaholics, bulimic workaholics, attention deficit workaholics, and savoring workaholics.[19] The three Spence and Robbins workaholism types are the only types that have received research attention.[20]

RESEARCH FINDINGS

The following sections of the chapter will review selected research findings that compare the three types of workaholics proposed by Spence and Robbins on personal demographic and work situation characteristics, job behaviors likely to be associated with workaholism, work outcomes, personal life and family functioning, and indicators of psychological well-being. Other studies not based on the Spence and Robbins workaholism types will also be incorporated in this review as relevant.

Personal Demographic and Work Situational Characteristics

A critical question involved potential differences between the three workaholism types on both personal demographic and work-situation characteristics such as hours and extra hours worked per week. If the workaholism types were found to differ on these (e.g., organizational level, marital status, hours worked per week), these demographic or work-situation differences might account for any differences found on work and health outcomes.

A number of studies have reported essentially no differences between the workaholism types on a variety of personal and work situation characteristics.[20,34–36] The workaholism types work the same number of hours and extra hours per week—significantly more hours and extra hours per week than the nonworkaholism types. The workaholism types were similar in terms of age, gender, marital and parental status, job and organizational tenure, income, and organizational size.

Validating Job Behaviors

There has been considerable speculation regarding the job behaviors likely to be exhibited by workaholics. This list includes job involvement, job stress,

nondelegation of job responsibilities to others, levels of job performance, levels of interpersonal conflict, and of lack of trust. Empirical research has examined some of these hypothesized relationships.

Both Spence and Robbins and Burke provide evidence of the concurrent validity of the Spence and Robbins workaholism profiles.[20,34] Both studies included the same measures of validating job behaviors (e.g., job involvement, job stress, time committed to job, perfectionism, nondelegation of tasks).

Comparisons of the workaholism types on a number of behavioral manifestations strongly supported the hypothesized relationships. First, EAs devoted more psychological sense of time to job than did both WEs and WAs. Second, WAs reported greater job stress than did EAs, both reporting greater job stress than did WEs. Third, both EAs and WEs reported greater job involvement than did WAs. Fourth, WAs indicated greater unwillingness to delegate than did both EAs and WEs. Fifth, EAs were more perfectionistic than were WEs.

Spence and Robbins found that WAs reported higher levels of job stress, perfectionism, and unwillingness to delegate job duties to others then did WEs. Kanai, Wakabayashi, and Fling, using the Spence and Robbins measures, reported that EAs and WAs scored higher than WEs on measures of job stress, perfectionism, nondelegation, and time committed to job.[31] Elder and Spence (unpublished manuscript), in a sample of women and men MBA graduates, report that WAs and EAs scored higher than WEs on measures of perfectionism, job stress, and nondelegation.[32] Taken together, these studies consistently showed that WAs exhibited higher levels of these validating job behaviors than did one or both of the two other workaholic profiles (WEs and EAs).

Antecedents of Workaholism

Three potential antecedents of workaholism have received some conceptual and research attention. Two of these, family of origin and personal beliefs and fears, are the result of socialization practices within families and society at large. The third, organizational support for work-personal life balance, represents organizational values and priorities.

Family of Origin

Robinson has written about work addiction as a symptom of a diseased family system.[19,37,38] Work addiction, similar to other addictive behaviors, is intergenerational and passed on to future generations through family processes and dynamics. In this view, work addiction is seen as a learned addictive response to a dysfunctional family of origin system. Pietropinto suggests that children of

workaholics learn that parental love is contingent on their (the children's) high performance.[39]

Although not tested directly (i.e., workaholism scores of parents were not examined in relation to workaholism scores of their children), Robinson and his colleagues equate elevated health symptoms of workaholic fathers with elevated health symptoms in their children (e.g., anxiety and depression) as support for such a relationship.[40,41]

Personal Beliefs and Fears

Burke examined the relationship of personal beliefs and fears and workaholism.[42] Beliefs and fears, a reflection of values, thoughts, and interpersonal styles, have been shown to be precursors of Type-A behavior.[43] Three measures of beliefs and fears developed by Lee, Jamieson, and Early were used.[44] One, striving against others, had six items (e.g., "There can only be one winner in any situation"). A second, no moral principles, had six items (e.g., "I think that nice guys finish last"). The third, prove yourself, had nine items (e.g., "I worry a great deal about what others think of me"). A total score was also obtained by combining these three scales.

Burke compared the three Spence and Robbins types on these measures of beliefs and fears. Was there a relationship between the cognitions that managers and professionals hold about their broader environment and levels of workaholism? Analyses provided evidence of such a relationship. First, all three beliefs and fears were significantly correlated with measures of feeling driven to work (positively) and work enjoyment (negatively). Second, comparisons of workaholism types showed significant type effects on all three measures of beliefs and fears as well as on their composite score.

More specifically, WAs scored significantly higher than WEs and EAs on measures of striving against others and no moral principles, as well as on the composite measure . In addition, WAs scored higher on the need to prove self than did WEs. Workaholism thus emerges as work behaviors in response to feelings of insecurity and low self-worth. This is best reflected in managers' feelings of being driven to work. Paradoxically, these beliefs and fears were also found to be associated with lower levels of work enjoyment .

Organizational Values

Burke[45] compared perceptions of organization culture values supporting work-personal life imbalance across the Spence and Robbins profiles. Organizational values encouraging work-family balance and imbalance were measured by scales proposed by Kofodimos.[46] Organizational values

encouraging balance was measured by nine items (e.g., "Setting limits on hours spent at work"). Organizational values supporting imbalance was measured by eight items (e.g., "Traveling to and from work destinations on weekends"). A total imbalance score was obtained by combining both scales, reversing the balance scores.

There was considerable support for the hypothesized relationships. WAs reported lower balance values than both WEs and EAs and higher imbalance values than did WEs. In summary, WAs saw their workplaces as less supportive of work-personal life balance.

Work Outcomes

The relationship between workaholism and indicators of job and career satisfaction and success is difficult to specify. It is likely that different types of workaholics will report varying work and career satisfactions.[12]

Burke[47] compared levels of work and career satisfaction and success among the workaholism profiles observed by Spence and Robbins. Four work outcomes, all significantly intercorrelated, were used. Intent to quit was measured by two items (e.g., "Are you currently looking for a different job in a different organization?"). This scale had been used previously by Burke.[48] Work Satisfaction was measured by a seven-item scale developed by Kofodimos.[46] An item was "I feel challenged by my work." Career satisfaction was measured by a five-item scale developed by Greenhaus, Parasuraman, and Wormley.[49] One item was "I am satisfied with the success I have achieved in my career." Future career prospects were measured by a three-item scale developed by Greenhaus, Parasuraman and Wormley.[49] An item was "I expect to advance in my career to senior levels of management."

WAs scored lower than WEs and EAs on job satisfaction, career satisfaction, and future career prospects, and higher than WEs on intent to quit. Interestingly, all three workaholic profiles (WAs, EAs, and WEs) worked the same number of hours per week, had the same job and organizational tenure, and were the same ages.

Psychological Well-Being

There is considerable consensus in the workaholism literature on the association of workaholism with poorer psychological and physical well-being.[50] In fact, some definitions of workaholism incorporate aspects of diminished health as central elements. It is not surprising that this relationship has received research attention.

Burke compared workaholism types identified by Spence and Robbins (1992) on three indicators of psychological and physical well-being.[51] Data were obtained from 530 employed women and men MBAs using questionnaires. Psychosomatic symptoms were measured by nineteen items developed by Quinn and Shepard.[52] Respondents indicated how often they experienced each physical condition (e.g., headaches) in the past year. Lifestyle behaviors were measured by five items developed by Kofodimos.[46] One item was "I participate in a regular exercise program." Emotional well-being was measured by six items developed by Kofodimos.[46] An item was "I actively seek to understand and improve my emotional well-being."

The comparisons of the workaholism types on the three measures of psychological and physical well-being provided considerable support for the hypothesized relationships. Thus, WAs had more psychosomatic symptoms than both WEs and EAs and poorer physical and emotional well-being than did WEs.

Kanai, Wakabayashi, and Fling, using the workaholism triad components developed by Spence and Robbins in a sample of 1,072 Japanese workers from 10 companies, found that both WAs and EAs reported more health complaints than did WEs.[31] There were no differences between these three groups on measures of smoking, alcohol consumption, and serious illness, however. Spence and Robbins, in a sample of men and women social-work professors, noted that WAs indicated more health complaints than did individuals in their other two workaholic profiles.[20] Elder and Spence (unpublished manuscript), in their study of women and men MBA graduates, observed that WAs and EAs indicated more health complaints than did WEs. They also reported that WAs were less satisfied with their jobs and lives than were EWs and WEs.[32]

These studies indicate that WAs generally report greater psychological distress than either of the two other workaholism types.

Extrawork Satisfactions and Family Functioning

A number of writers have hypothesized that workaholism is likely to negatively affect family functioning.[6,16,19] Empirical examinations of this hypothesis are unfortunately few. Robinson and Post (1997) report data from a sample of 107 self-identified workaholics (members of Workaholics Anonymous chapters in North America) who completed WART and a family assessment instrument.[41] Three levels of WART scores representing increasing levels of workaholism were compared. High scores differed from low and medium scores on six of the seven family assessment scales, indicating lower (poorer) family functioning in all cases.

Robinson also reviews the literature on children of workaholics.[53] Robinson and Kelley asked 211 young adults (college students) to think back to their childhoods and rate the workaholism of their parents using WART.[40] Participants also completed measures of depression, anxiety, self-concept, and locus of control. College students who perceived their parents as workaholics scored higher on depression and external locus of control. Children of workaholic fathers scored higher on anxiety than did children of nonworkaholic fathers. Interestingly, mothers' workaholism had no effect on these outcomes. Robinson and Rhoden (1998) attribute the distress of children of workaholic fathers to the presence of a diseased family system, more evidence that work addiction contributes to family dysfunction.[54]

Burke[42] considered the relationship of workaholism types identified by Spence and Robbins and extrawork satisfactions in a sample of 530 employed women and men MBAs.[55] Three aspects of life or extrawork satisfaction were included. Family satisfaction was measured by a seven-item scale developed by Kofodimos.[46] One item was "I have a good relationships with my family members." Friends satisfaction was measured by three items developed by Kofodimos.[46] An item was "My friends and I do enjoyable things together." Community satisfaction was measured by four items also developed by Kofodimos.[46] A sample item was "I contribute and give back to my community."

The comparisons of the workaholism types on the three measures of life or extrawork satisfactions provided moderate support for the hypothesized relationships. WAs reported less satisfaction on all three measures than did WEs and less satisfaction on one measure (family) than did EAs.

Evaluating Workaholism Components

The two workaholism measures used in two or more research studies all contain components or factors.[19,20] Do these individual factors have similar and independent relationships with particular outcomes? Or might they have opposite relationships with some outcomes and no relationship with others?

Burke considered the question of whether the workaholism triad components had different consequences.[55] A research model was developed to guide both variable selection and analysis strategy. There have been suggestions that both personal and work setting factors are antecedents of workaholic behaviors.[11,12] Thus, both individual-difference characteristics and organizational factors were included for study. Five panels of predictor variables were considered. The first consisted of individual demographic characteristics (e.g., age, gender, marital status). The second consisted of three measures of personal beliefs and fears.[44] The third consisted

of work situation demographic factors (e.g., years with present employer, size of organization). The fourth included measures of perceived organizational values supporting work-life balance.[46] The fifth included the workaholism triad components (work involvement, feeling driven to work, work enjoyment). The important questions were whether the workaholism triad components would add significant increments in explained variance on particular work and personal well-being measures, and if they did, which of the workaholism triad components accounted for these increments.

Outcome measures included aspects of job behaviors, work satisfaction (e.g., job satisfaction, career satisfaction, future career prospects, intent to quit), psychological well-being (e.g., psychosomatic symptoms, emotional well-being, lifestyle behaviors) and elements of life satisfaction (e.g., family satisfaction, friends satisfaction, community satisfaction).

Although significantly intercorrelated, the three workaholism components had only moderate interrelationships, none of these correlations exceeding .25. The three workaholism components, considered together, almost always accounted for significant increments in explained variance on outcome measures, controlling for a number of personal and work-setting factors. The components had a greater impact on job behaviors and work outcomes likely to be evidenced by workaholic behaviors and less impact on psychological well-being and extrawork satisfactions. It is likely that the latter would be affected by a wider array of work and life experience, workaholic behaviors being only one of them.

An examination of the relationships among specific workaholism components and the various types of outcome variables revealed an interesting, and complex, pattern of findings. First, work enjoyment and feeling driven to work were significantly related to all seven job-behavior measures, while work involvement was significantly related to about half of them. Respondents scoring higher on the workaholism components also scored higher on job behaviors reflecting workaholism, with one exception—difficulty in delegating. In this instance, respondents scoring higher on work involvement and feeling driven to work and lower on work enjoyment reported greater difficulty in delegating.

Second, joy in work was the only workaholism component related to work outcomes. Respondents reporting greater work enjoyment also reported more job satisfaction, more optimistic future career prospects, and more career satisfaction to date.

Third, both work enjoyment and feeling driven to work were related to indicators of psychological well-being but in opposite directions. Respondents reporting greater work enjoyment and lesser feelings of being driven to work indicated more positive psychological well-being.

Finally, workaholism components had a significant effects on only one of the three measures of extrawork satisfactions. Respondents reporting greater work involvement and lesser feelings of being driven to work reported greater community satisfaction.

In sum, although work enjoyment and feeling driven to work had consistent and similar effects on job behaviors reflecting workaholism, these two workaholism components had different effects on work outcomes and psychological well-being. One, work enjoyment, was associated with positive outcomes; the other, feeling driven to work, was associated with negative outcomes. Finally, none of the workaholism components showed consistent relationships with measures of extrawork satisfactions.

Gender Differences

Research has also focused on gender differences in workaholism and workaholism-related variables. Spence and Robbins compared men and women social workers in academic positions on their workaholism triad (work involvement, feeling driven to work, work enjoyment), behavioral correlates (e.g., perfectionism, nondelegation) and health complaints.[20] In this sample, women scored significantly higher than men on feeling driven to work, work enjoyment, job stress, job involvement, and time commitment scales; no differences were found on work involvement, perfectionism, and nondelegation scales. Women also reported more health complaints.

Elder and Spence reported comparisons of men and women MBA graduates on these measures along with a few others.[32] Few differences were found. Men did score significantly higher than women on job involvement. There were also similar, though not identical, relationships among the measures for both genders. The three workaholism triad measures were significantly correlated for men; the feeling driven to work and work enjoyment scales were uncorrelated for women.

Doerfler and Kammer examined the relationships of levels of workaholism with both sex and sex-role orientation (masculine, feminine, androgynous).[25] They collected data from attorneys, physicians, and psychologists. Workaholism was measured by the 10 characteristics proposed by Machlowitz.[8] They reported that 23 percent of their respondents were workaholics, consistent across the two sexes and three professional groups. Interestingly, a majority of single workaholics were female, and female workaholics reported more masculine and androgynous characteristics than feminine characteristics.

Burke compared responses of 277 men and 251 women in his study of workaholism.[57] He first compared the prevalance of Spence and Robbins

workaholism types separately in men and women. There were no significant gender differences in these distributions. Women and men fell into each of the three workaholism types to a similar degree.

He then compared responses of these men and women on the three workaholism components and on a number of validating job behaviors. It is important to first examine gender differences on personal and situational characteristics before considering gender differences on the workaholism measures to put the latter into a larger context. Females and males were similar on a minority of the items: organizational level, organizational size, and the proportion having worked part-time at some point in their careers. However, there were considerably more statistically significant female-male differences on these demographic items. Males were older, more likely to be married, to be in longer marriages, more likely to have children, to have more children, had completed their MBA degrees earlier, were less likely to have gaps in their careers, earned higher incomes, and had been in their present jobs and with their present employers longer. It should be noted that many of these demographic characteristics were themselves significantly correlated and the sample sizes of both female and males were large.

Female-male comparisons were undertaken on the three workaholism components as well as on the seven job-behavior validation measures. Significant differences were present on 6 of the 10 measures. Females were less work involved, devoted less time to their jobs, worked fewer hours, and worked fewer extra hours, but reported greater job stress and greater perfectionism than males. Females and males reported similar levels of work enjoyment, feeling driven to work, job involvement, and difficulties in delegating.

ADDRESSING WORKAHOLISM

There is a large speculative literature suggesting ways to reduce levels of workaholism. One part of this work focuses on individual and family therapy;[19,58] a second part emphasizes organizational and managerial interventions.

Individual Counseling

Workaholics Anonymous chapters have sprung up in some North American cities. These groups, patterned after Alcoholics Anonymous self-help groups, endorse the 12-step approach common to the treatment of a variety of addictions. Killinger and Robinson include chapters outlining actions an individual might pursue to reduce levels of workaholism.[6,19]

It has also been suggested that workaholics must examine their feelings as well as their thought patterns.[59] Korn, Pratt, and Lambrou advise individuals

to reduce impulses supporting workaholism and reestablish healthy priorities.[13] Other writers have advocated self-help programs for workaholics.[4,5,7,10,60] These include identifying alternatives to work, exploring new hobbies and outside interests, and enjoying doing nothing. Professional help, in the form of both individual and group counseling, may be useful for those interested in developing new patterns of behavior.[15,22].

Burwell and Chen apply rational-emotive behavior therapy (REBT) to an analysis of the causes of workaholism and its treatment.[61] Workaholism has, as one of its possible causes, low self-image and low self-esteem. One of the basic irrational beliefs in REBT is that one must impress others through accomplishments and outperform them. The difficulty in treating workaholism is compounded by the societal acceptance of workaholism and denial of the problem. REBT addresses the irrational beliefs that drive workaholism. REBT tackles irrational beliefs using cognitive reframing, practicing unconditional self-acceptance, and behaving in ways that are opposite to previously held beliefs. The latter might involve, for example, delegating tasks to others, setting boundaries between work and home, attempting to balance work and life, and engaging in more leisure activities.

Family Therapy

Robinson and his colleagues, consistent with their clinical and consulting perspective, focus on treatment, both individual and family. This is not surprising, given the central role they give to both family of origin and current family functioning in the development maintenance and intergenerational transmission of workaholism. The treatment recommendations Robinson offers are similar to those offered to alcoholic families.[19]

In this view, denial is common among workaholics and their family members. Family members are reluctant to complain. Workaholics define their behaviour and symptoms in a favorable light.[6,16] Parental expectations of children, often unrealistic, must be addressed. Family structures need to be identified. How do family members collude with the workaholic parent? Family members need help in expressing their negative feelings (e.g., frustration, hurt, and anger) to the workaholic. Families need to learn to set boundaries around the amount they work together and talk about work. Family members can set goals to improve family dynamics (e.g. communication, roles, expression of feelings). Families can also gain a deeper understanding of the intergenerational transmission of addictions. Family involvement and counseling is another vehicle for assisting workaholics. These initiatives may uncover family dynamics that contribute to the workaholic pattern, make spending time with families more satisfying, and create rewards for workaholics for their family participation.

Workplace Interventions

How can employers help workaholics and workaholics help themselves? Schaef and Fassel offer the following ideas.[11] Employers should pay attention to the performance and work habits of employees and be alert to warning signs of workaholism. They should not reward addictive behavior, but recognize those employees who are productive but also lead balanced lives. They should ensure that employees take vacation time away from work. Finally, job insecurity, work overload, limited career opportunities, and lack of control can make employees feel compelled to work longer hours. If these factors exist, employers should try to minimize their impact on the atmosphere within the organization.

Haas also highlights the role that managers can play in helping their workaholic employees to change.[62] Workaholic employees should be referred to an employee assistance program or a recovery program to start treatment processes. Managers should help prioritize projects for employees as long-term and short-term assignments. Workaholics must be encouraged and helped to delegate their work. At the end of each day, the manager should meet with the employee to discuss what has been accomplished during that day and to plan (down to short intervals) for the following day. The employee should be given specific times to take breaks and to leave work so that positive terms may be acquired through training. It may also be possible to reduce the negative effects of workaholism, particularly well-being and health consequences, through stress management training.[63]

The development of workplace values that promote new, more balanced priorities and healthier lifestyles will support workaholics who want to change their behaviors.

CONCLUSIONS AND IMPLICATIONS

There is general agreement that workaholism is a stable individual difference characteristic. There is also some consensus that workaholism is likely to be a central concept in understanding the relationship of workplace experiences, typically involving work stressors, and a variety of work outcomes (satisfaction, job performance), extrawork satisfactions (family, friends), and health indicators (psychosomatic symptoms, medication use).

Workaholism has been shown to have little relationship to more generic ethics (work, achievement, leisure time) or to other concepts suggested to be similar (Type-A behavior, obsessive thinking, compulsive finishing, delayed

gratification). Thus, workaholism likely will have an impact on the satisfaction and well-being of organizational members.[50]

This review has identified some definitions of workaholism that appear adequate for research purposes.[12,19,20] However, progress needs to be made on the measurement front. Two measures of workaholism warrant further attention.[19,20] Both the Spence and Robbins measure and the Robinson measure have been used in 10 or more studies. There is considerable support for the workaholism profiles identified by Spence and Robbins; at least five separate studies using different samples in several countries have confirmed their existence. More work needs to be done with the Robinson measure to verify his five factors in other studies. Although almost all of Robinson's studies have used a total score over the 25 items, it may be that one of the five factors is the most toxic.

More effort must be undertaken on several fronts to validate those measures of workaholism that show promise. First, workaholism must be shown to predict validating job and work behaviors (e.g., perfectionism, nondelegation). Second, workaholism must be shown to predict extrawork satisfactions (e.g., family satisfaction and family functioning). Third, workaholism must be shown to predict psychological well-being (e.g., emotional health). Fourth, self-reports of workaholism must be shown to predict others' reports (spouse, coworkers). Fifth, measures of workaholism must be shown to be stable over time. So far, only Robinson, Post, and Khakee have examined this.[27]

It is also important to understand the relationship of workaholism to concepts having potential overlap (e.g., Type-A behavior, compulsion-obsession). Robinson's measure, in particular, includes elements common to most depictions of Type-A behavior.

More research must be devoted to understanding the antecedents of workaholism. Research to date has considered family of origin,[19] personal beliefs and fears,[42] and workplace organizational norms and values.[45] It would also be worthwhile to more systematically consider the role played by demographic factors (e.g., age, gender, occupation).

Porter explores reasons people feel compelled toward excess work when externally imposed demands are absent.[63] There are several reasons why people work hard, and each reason may have both desirable and undesirable consequences to the individual, the organization, or both. Porter provides a description of the workaholic consistent with the addiction paradigm. She concludes with a plea for a healthier approach to hard work that includes a balance of nonwork interests.

Hours worked, in itself, is not particularly informative in explaining health and satisfaction. Is working hard always problematic? The answer is a definite no! It seems to make a difference why the person is working hard

(low self-esteem) and how the person is working hard (perfectionistic, obsessive-compulsive, high levels of stress). The old adage that "hard work never killed anyone" may need to be revised.

The development of norms based on large representative samples would be a significant contribution to the field. With few exceptions, most research on workaholism has involved relatively small samples. It becomes difficult to make comparisons across studies. The two more commonly used measures face these limitations.[19,20] That is, different values are used to create the workaholism types, or high, medium, or low levels of workaholism on the Robinson measure in each study.[20]

Several specific questions require further attention. Do women and men exhibit similar levels of workaholism? Does workaholism have the same antecedents and consequences in women and men? Although workaholics likely exist in all professions and jobs, and in all organizations, are some professions more likely to attract and develop workaholics than others (e.g., stock brokers versus primary school teachers)? And again, although workaholics are likely to exist in all countries, at least in developed and industrialized countries, are some countries more likely to develop workaholics, (e.g., Japan and the United States versus Spain and France)?

It is also important to undertake longitudinal studies of the development and impact of workaholism. Most studies, involving one-time data collection only, cannot address issues of causality in a meaningful way. Does workaholism cause dissatisfaction, or does dissatisfaction cause workaholism?

Since almost all studies to date have employed self-report data to assess levels of workaholism as well as any other variables of interest, it is critical to begin to add more independent and objective measures. These might involve the use of an organization's performance-evaluation data to assess work contributions, coworker data to assess workplace relationships, spouse and children data to assess marital and family functioning, objective medical data to assess physical health and physiological data (e.g., heart rate) to determine levels of daily biological functioning.

It is also useful to make a distinction between statistical significance and practical significance. Some of the statistical findings reported in the manuscripts that were reviewed, while significant, may represent relatively small differences or effects. Nevertheless, if these identify a few individuals who may be at risk and result in positive change, the practical significance of these findings is large.

Although useful information about workaholism and its correlates can be gleaned from studies of college students, it is imperative that efforts to replicate and extend such studies use samples of employed men and women, particularly

in occupations where they have the freedom to give free rein to their drive to work.

It is also important to link and integrate two streams of research initiatives that have existed relatively independently. The older stream resides in clinical and counseling psychology and family dynamics; the newer stream has emerged in organizational behavior and work psychology, with a link to health. Useful insights and contributions have been made in both.

ACKNOWLEDGMENTS

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The Remarkable Normalcy of Dying to Kill in Holy War

Rona M. Fields

Abraham Maslow raised the question of normalcy in the midst of the madness of terror and genocide when he asked, Which was normal: The SS guards who dropped pellets of Zyclon B gas into a chamber full of helpless men, women and children, watched their death agonies, and went home at the end of the day to kiss their wives and play with their children? Or the terrified inmates of the concentration camp, who, realizing their helplessness in the face of certain death, became clinically depressed, suffering delusions, hallucinations, and depersonalization?

I was reminded of this passage in *The Psychology of Being*[1] in 1998, in Santiago, Chile, after recording hours of interviews with torture survivors and reviewing some of the decades-old case affidavits from the Truth and Justice Commission files. Chile had adopted an impunity system whereby testimony and affidavits did not eventuate in trials, convictions, and penalties. The bound documents were filed away with limited access. Instances of torture and disappearance started on the day of the coup, September 11, 1973. Everyone except President Allende, who died in his office, was led out the side door of the presidential palace at gunpoint, bound, and trucked off to the stadium, which became a makeshift concentration camp. Photos of this became iconic of the coup. There was a significant effort made to destroy all such evidence, but many photos appeared in the foreign press. Memory was restructured in Chile, no less than it was by Pol Pot in Cambodia. By reinventing reality, literally putting a different frame on the same picture, predators rationalize their actions.

Ideological framing, calling a military initiative a "war to defend democracy" rather than a "preemptive attack," changes the action from an offensive initiative to a defensive response. Similarly, identifying the enemy as a "terrorist" rather than a "patriot" or "freedom fighter" changes the subject and the object of aggression. General Augusto Pinochet, several years later, explained his actions as having martyred himself. In the same vein, he presented the death of Allende and the disappearances of thousands of his political adversaries as preventive actions to ensure that his opposition did not have martyrs around whom to rally. In fact, dealing with this issue of normalcy 30 years later, Pinochet, charged with crimes against humanity, used the issue of mental competency to thwart efforts to extradite him from England and try him in Spain. In this kind of contest of normalcy the subject claims, or his doctors claim, he cannot meet the norms for acting rationally, thoughtfully, and with adequate memory to contribute to his own defense.[2] Thus, over time, whether an action was planned and executed by a normal person becomes instead an issue of their normalcy to stand trial for the action.

This re-creation of reality is physically evident in the presidential palace itself. On that September day in 1998, a cursory examination revealed a visible difference between stones and bricks that had been recently replaced and the patina of the old masonry of the original structure.

I asked a young military guardsman what had happened to the brickwork and whether there hadn't been a doorway at this spot. He said he hadn't noticed anything, but then, given that he was less than 25 years old, he referred the inquiry to his superior. This man, perhaps five to ten years his senior, also had no idea of what had happened in this spot 25 years before. He explained that be was from the countryside and hadn't ever been in the capitol until he turned 18. And so it went. I snapped photos and then, lest my interest in this history endanger me, walked quickly away.

But the questions remained. The files of affidavits detail torture, murder, and disappearances. Thirty-five thousand were tortured. More than 3,000 were killed and made to "disappear."

The affidavits from the Truth and Justice Commission hearings not only detail the torture, but they also often include the names of the torturers and the places where these obscenities transpired. Several of the identified torturers were easily found. One of them, a former policewoman, had trained German Shepherd dogs to rape women prisoners. I asked her to talk with me about the dogs.

I started by asking how in the world she could train dogs to do what was so completely unnatural to their species. She was quite forthcoming in explaining how the women were spread-eagled by male guards and what she did to train and reinforce the dogs. When asked how she felt now about what she had done

and how she dealt with her memories. She said: "That was a long time ago. Now is the time for Christian forgiveness!" Another infamous torturer was a policeman whose specialty was manipulating electrical charges on prisoners strapped to an iron bedspring. His particular "genius" was that he knew how far to go without killing the subject. When this kind of torture was first used, most prisoners died before they could reveal anything. Therefore, experienced police were brought in to replace the military interrogation personnel. This man had later become a suburban wine merchant, and when interviewed he claimed that he didn't know what the electrodes were engaging because he could only see his control panel and was directed by his superiors on the voltage. It was all so "normal"! In fact, it is remarkably reminiscent of the Stanley Milgram experiments in which he tested obedience to authority by asking subjects to deliver a n electric shock to a person in a glass booth, who enacted increasing pain and discomfort with every elevation of the feigned voltage. The subjects obeyed the authoritative director rather than considering the obvious misery of the "victim."[3] Social psychologist Phillip Zimbardo did a variant on this experiment. He divided a group of undergraduate student volunteers into two groups, "guards" and "prisoners." The fake prison contained barred cells, sparsely furnished emulating the local jail. The guards were told that these prisoners were violent and would try to break out and riot. Very soon, the guards became brutal and the prisoners, aggressive. When he saw what was happening, Zimbardo called off the experiment before the scheduled completion date.[4]

FINDING A SYSTEM FOR MEASUREMENT

War, intercommunal violence, terrorism, genocide, and criminal violence engender an abnormal social mind-set. After all, the idea of normalcy is predicated on a static, two-dimensional, bell-shaped curve. But children growing up in conditions of violence and social prejudice are likely to map their many dimensions of emotion and motivation on other parameters that incorporate their own dimensions of motivation, emotion, values, and beliefs. In order to place the individual in relation to a larger population, it is necessary to use measurement instruments that are multifactor tests. Further, these instruments yield norms and profiles they are readily influenced by the test takers' life experiences at the time they are answering the questions. Thus, an individual who is under great stress will more likely produce a Minnesota Multiphasic Personality Inventory (MMPI) profile that is high on the Pd (Psychopathic) index of the MMPI even though the individual is not necessarily psychopathic.

Emotions, motivation, attitudes, and values not generally measured on a scaling device amenable to a bell curve are also not indices of normalcy per

se as much as they are measures of an individual's state at the time of testing. In that regard, profiles and scores can be anywhere on the bell curve for a given time and place. These are more dynamic indices than the cognitive measures.

Projective tests can reveal information that is obscured from behavioral observations and even from the awareness of the individual himself or herself. In this respect, projective tests more effectively mirror the multidimensionality of the individual. One of the most useful tools for examining achievement motivation has been Murray's Thematic Apperception Test.[5] The test consists of 20 ambiguous picture cards with instructions to make up a story. Thus the individual projects his or her fantasy, and since the stimuli are ambiguous, the stories themselves are individual and neither right nor wrong. Murray predicated his system of interpretation on the assumption of "need states" and postulated "n-achievement." Working with patients who had been in combat during WWII and with mental patients, Magda Arnold began elaborating on the n-achievement thesis when she became convinced that need states did not describe motivation and that achievement is only one of several basic motivational objectives. She developed and standardized a system of scoring this qualitative instrument in a multidimensional and dynamic manner.[6] This became one of the standard instruments in my studies of trauma survivors, children growing up under conditions of violence, and members of paramilitary (aka, terrorist) groups.[7] Motivational Index scores on Story Sequence Analysis of the Thematic Apperception Test (SSA TAT) have been validated with an interscorer reliability coefficient of .86. The curve deviates to the left on the populations described in these studies, as do other measurements of cognitive and moral development. But statistically, it is to be expected that a subset of a population will tend to deviate toward the low end. In order to fix the norms for these children, the social scientist would have to shift the scaling of T scores, or, as is often done, weight the scores accordingly. But the obvious fact these data provide is that the conditions of these subjects' daily lives mandate against their development of moral judgment, as might their age peers in a secure society.[8]

This is not to suggest that children growing up in violence are essentially abnormal and that their behavior will be abnormal and therefore antisocial. Studies of children and members of paramilitary organizations indicate that on measures of intelligence and personality, they are distributed as normally as any large population (except in some particulars, where there is a pattern that is still within the range of normal distribution). I found these children of violence to be healthy, intelligent, charming, and attractive. Certainly they are not the psychopaths described in the media and by so-called experts on terrorism. Nor are they withdrawn isolates suffering from chronic post-traumatic stress syndrome.

Similarly, studies of adult members of paramilitary organizations found them to be of normal or above average intelligence, very concerned with issues of right and wrong, and see themselves as vulnerable members of a threatened group, unprotected by and isolated from the institutions of the larger society—in short, alienated, socially marginalized, and politically ineffectual.

Research using standardized psychological tests shows remarkable similarities among holy warriors who kill themselves in the act of killing others and those who operate within organizations called "terrorist" in many different cultures, countries, and historical periods. Furthermore, all criteria applied in the laboratory and on-site show that torturers are within the normal standard deviations from the mean on the bell-shaped curve. After all, under other social circumstances they might devise and execute freshman pledge tasks for high school or college fraternities. People were generally shocked to learn that the young American soldiers at Abu Ghraib committed horrific acts against prisoners and took pictures of themselves doing it. No one even claimed temporary insanity.

Formerly, when I presented these facts about members of groups labeled "terrorist," I was often branded a terrorist sympathizer, or even, in the United Kingdom, a terrorist. Studies of the neuropsychological damage done through the forced application of extreme stress, beatings, sensory deprivation, and sensory overstimulation on detainees alleged to be members of the Irish Republican Army (IRA) provoked Sir William Deeds, Member of Parliament and publisher-editor of the *Daily Telegraph*, to a heated charge on Thames-TV in late October 1973. In reference to *Society on the Run*,[9] which reported measurable brain damage in two-thirds of the men tested, Deeds declaimed, "Those Irish republicans and your other friends in Long Kesh are all low IQ types anyway!"

The book was subsequently removed from the market and 10,000 copies were shredded. Its author, Rona M. Fields, was on the terrorist list for many years afterward; was denied admission to the United Kingdom and denied access there. Thirty-two years later, British police and intelligence reported in stunned press statements to an equally stunned public that the suicide bombers presumed responsible for the July 7 and July 21, 2005, transit attacks in London are normal young British subjects of the kind that might live next door in any city or town.

This marks a turning point in understanding extraordinary behaviors by ordinary people. But perhaps it is actually a revisited turning point. Hannah Arendt, in writing about Adolph Eichmann on trial in Jerusalem, subtitled her book, "On the Banality of Evil."[10] And indeed, the very normalcy of a logistician filling cattle cars with prisoners and estimating the costs and amounts of Zyclon B needed to murder them is a study in the normalization of the abnormal.

As clinical psychologists generally hold the view that normalcy is measurable and that which is abnormal will be evidenced through our toolbox of well-standardized tests. But we are measuring individuals and not societies. In company with the SSA TAT, the Tapp Kohlberg questions of legal socialization,[11] predicated on Jean Piaget's stages of moral development,[12] and Spielberger's State Trait Personality Index (STPI)[13]proved themselves, over time and many different cultures and languages, the measuring instruments that would provide insights into the mind of the terrorists and the motivation for suicide-homicide.

PREDICTING A TERROR VOCATION

Certain environmental circumstances are likely to limit choices generally: conditions of fear, violence, chaos, and positioning as marginal within the larger society. As Piaget describes it, conditions that limit a child's experience of a variety of roles—particularly representations of political efficacy—may lead them to the barricades rather than the bar of justice. A child who is able to identify either as a victim of aggression or as an aggressor becomes truncated at what Piaget and Tapp and Kohlberg describe as Level II on the developmental scale of moral judgment-retributive justice or vendetta. Aligned with this system of assigning stages of moral justice are some personality traits or states that combine with or emanate out of this truncation. Individuals are angry when they feel violated, and they may engage in angry behaviors without any remorse or guilt feelings, although they do feel guilt about other behaviors. Furthermore, they do not experience anxiety about their anger and angry behaviors, although they do admit to anxiety about other things. One other characteristic is curiosity. The individual who joins a paramilitary or terrorist group has a higher level of risk taking because he or she is curious. These personality and moral development factors on diagnostic tests present a distinctive profile. They are also characteristics of what Eric Hoffer designated "true believer."[14] Such individuals are well within the norms for other personality traits and follow a bell-shaped curve of distribution in intelligence.

Arnold's SSA TAT is another useful measure for predicting the prospect for a terror vocation, and it also has some value, in predicting the likelihood of suicide/homicide. Using 10 standard TAT cards, stories are elicited that tell what is happening, what did happen, what will happen, and how it will end. These stories, regardless how sparse, can indicate the choice behaviors of the individual as well as their decision-making process. The themes of the stories are extracted and listed in order. These "imports" form a story themselves—the story sequence alluded to in the test's title. The imports

are then scored on a template ranging between −2 and +2. Added up, the 10 stories provide a motivation index score. These are frequently elaborations on the responses to the Tapp Kohlberg questions of legal socialization used to determine the level of moral judgment/political socialization. SSA includes the categories right and wrong, achievement, response to adversity, and human relationships. In addition, the profile was formulated on the Spielberger STPI.

Children evaluated for predicting a terror vocation were also administered a Violence Distance Scale interview. This was composed of questions assessing exposure to acts generally considered threatening. During the first several years of the study, the precise proximity and kind of violence experienced had no correlation with the individual's scores on this and other tests.[15]

In one study of Palestinian suicide bombers during the second Intifada it was found that each of them had experienced personally or within the primary or extended family violence or fatal trauma at the hands of the Israeli Defense Forces (IDF). However, the suicide bombers who acted during the period of the Oslo accords were raised in poverty but had not had proximal experience of deadly violence.[16]

Finally, studies of Palestinian children living in a variety of environments during 1982–1983 found that children living in Beit Safafa, a Palestinian village incorporated into Jerusalem, who had not experienced proximal violence, had, by January 1983, so thoroughly identified with the victims of the Sabra-Shatila massacre through watching television that they reported personally experiencing bombing and shootings and that they wanted vengeance or vindication. In the Palestinian camps on the West Bank children were talking about taking vengeance with stones.

It was four years later that the first Intifada started with the Children of the Stones. The predictive formula that evolved out of these researches was presented in a paper at a conference on Children and War in Stockholm Sweden in 1990. The formula summarized these findings as $T = SPV(LSIII)(MI.SSA)$.[17] Social political violence as quantified by the average level of legal socialization, multiplied by the quantity derivative from the average motivation index score as measured by story sequence analysis, yields the likelihood for a terrorist vocation.

Martyrdom homicide did not originate with Palestinian suicide bombers, nor, for that matter, with Muslims. Eighteenth-century nationalists, anarchists, and nihilists, in their respective quests for attention to their cause, conducted terror operations including targeted assassination, suicide-homicide actions, and public self-immolations. Though they were often dubbed "fanatics" and were usually imprisoned or deported, they were not considered mentally ill. Instead,

they were much like the profile derived from using the Spielberger STPI on members of terrorist organizations. From all published reports, they were angry people, and although they felt guilt about other things, were not guilty about expressing their anger; were not anxious (therefore unlikely to have met the diagnostic conditions for neurosis), and were curious—risk takers.

SUICIDE

There is a body of research and theory on suicide and the issue of whether a suicide is ever committed in a state of mental normality. The question might better be phrased, What are the motivational dynamics of the individual who chooses to take his or her own life? In so-called sanctioned suicide, or choosing to end one's life when faced with terminal illness, the sanctions specify that the individual must be of sound mind. Does the same distinction apply for suicide-homicide? Undoubtedly there are instances in which the subject would be diagnosed as pathological. However, the postmortem psychological studies of the nine suicide-homicide bombers who acted during the period of the Oslo accords, as well as journalistic accounts of the Palestinian suicide bombers who followed, produce a standard bell curve. If the study is extended to Al-Qaeda operatives, there are few if any indices of diagnosable pathologies, although in some instances there were apparent symptoms of depression or attention deficit hyperactivity disorder (ADHD). In others, there is a history of head trauma that might have had behavioral consequences. These latter cases cannot be adequately diagnosed. But even though the majority of members of paramilitary or terrorist organizations test at the level of Retributive Justice, which is Level II on the Tapp-Kohlberg or Piagetian model, and average a −1 motivation index score, they are not pathological nor retarded. The motivation index score is calculated on a basis of likelihood for successful achievement or conclusion in strategies for achievement, human relationships, right and wrong, and dealing with adversity. These are predictable outcomes for people growing up in war, violence, disadvantaged social circumstances, and restricted opportunities to engage in politically effective roles.

The first suicide-homicide by a Palestinian in Israel was on Friday, April 16, 1993, near Mechola in the Jordan Valley. The perpetrator, a member of Hamas, placed a car loaded with explosives in between two buses next to a restaurant and then detonated the explosives with himself inside the car. There is a methodological problem in studying this specific Palestinian suicide bomber to gain insight into a more generalized population of suicide-homicide perpetrators. While much more is known about a particular case

allowing more complete analysis, the motivation, social influences, demographics and behavioral dynamics vary widely from person to person. But in studying the Palestinian suicide-homicide and terrorist population, several theoretical models have emerged that may be quite productive in wider application.

One such is the model based on Durkheim's classic work on suicide, particularly his formulation of altruistic and fatalistic suicide.[18] These two categories of suicide can best be applied to traditional societies going through political, social, and economic transitions. Working in the period (1897) of the emergence of nationalist, anarchist, and nihilist terrorism, Durkheim recognized that these emanated from traditional societies undergoing transitions, in contrast to postindustrialized societies in which suicide was categorized as egoistic and anomic. People who commit altruistic suicide, according to Durkheim, have become deeply integrated into a social group and suicide becomes a "duty" for members of that group. Examples of this include the Peoples' Temple mass suicide in Guyana and David Koresh and his Branch Davidians in Waco, Texas. There is a socialization trajectory that may be compared with the socialization for membership in a gang or a paramilitary organization. The major difference is that the suicide objective obviates much of the training and the need to avoid capture, and subsequent integration into the community. The successful mission is termination. This, of course, engenders fatalism because the suicide act satisfies the group. This sacrifice has helped the collective achieve its goals. The pattern of suicide terrorism indicates that members of religious organizations carry out most of these acts of suicide terrorism. Religiously motivated suicide terrorists are of course not necessarily Islamic militants. However, profiles of perpetrators in the Middle East indicate that most of them were educated in religious schools and were known to have been diligent practitioners of Islam in their everyday life. Their suicidal acts stem from a strong religious conviction in the glorious destiny that awaits the perpetrator in the afterlife having fulfilled his mission on earth.[19] This corresponds to the altruistic typology espoused by Hazbolah, Hamas, and Islamic Jihad. According to Ganor,[20] the typical Hamas *shahid* is a religious, young, unmarried, unemployed male. This same profile fits the Liberation Tigers of Tamil Edem (LITR) in Sri Lanka.[21] Women, who have carried out the majority of suicide attacks in behalf of the Kurdish Workers Party (PKK) in Turkey, also match the same socioeconomic profile. They ranged in age from 17 to 27, and generally came from poor families and lacked professional skills.[22] Despite propaganda that represents the Chechen women suicide terrorists as the Black Widows, most of them are single and have the same socioeconomic profile.

The phenomenon of suicide terrorism can be seen as a manifestation of the altruistic type or the fatalistic type, or, most often, a combination of the two. According to Young,

> These two types should be treated as twin sisters nursed in the same type of socio-cultural system. Their differences can be sought only from the subjective meaning of the suicidal action if a person commits suicide to fulfill his duty, his psychological state may either be one of serene conviction [altruism] or it may be of extreme fear and despair [fatalism].[23]

Several theorists have characterized fatalistic suicide emanate from continuous political and economic oppression. As noted by Stack,

> Fatalistic suicide . . . results from excessive regulation, such as that of persons with futures blocked, aspirations choked by oppressive discipline and persons living under physical or moral despotism . . . Fatalistic suicides involve an escape from a normative situation from which there is no appeal.[24]

The specific vector needn't be a foreign oppressor. Stack contends that rates of fatalistic suicide are related to the degree of political totalitarianism

Durkheim's subcategory acute altruistic suicide refers specifically to the suicide of martyrs who perceive a lofty and glorious place for themselves beyond life on earth. According to Young, the person who commits acute altruistic suicide must be certain he has no life of his own and believes in a beautiful conception of the afterlife and a serene conviction. This person is carried to his or her death in a burst of faith and enthusiasm.[25]

The other subcategory Durkheim introduced is fatalistic suicide. Acts of fatalistic suicide are characteristic of situations of hopelessness that result from continuous political and economic oppression. Stack noted that

> In such a totalitarian environment marked by relatively low freedom and respect for human dignity, already suicidal persons have an additional reason for viewing life as meaningless and are more apt to commit suicide.[26]

Researchers on terrorism at Haifa University theorize that the Durkheim models of altruistic and fatalistic suicide are appropriate categories to use in the study of terrorism, and they particularly related this model to suicide terrorism. They note that none of the previous researchers have linked it to terrorism at all.[27]

SOCIAL NORMS IN RELATION
TO THE LARGER SOCIETY

Violence, marginalization, and repression have been linked together with a "failed polity" as the recruiting ground for prospective terrorists. These conditions are also the foundation for collective violence and revolution. The demographics are not identical for terrorists and the smaller percentage that become suicide bombers. There are socioeconomic differences between the two groups, but this varies by location.

European political history, too, has seen cases in which a marginalized minority seeks to reclaim its *legendary* history (witness Northern Ireland and the Bosnian and Kosovar aspirations).

The intellectual achievement and tolerant attitudes of the Moors—the Caliphate that instituted the Golden Age of Spain—sustained the scientific and mathematical enlightenment of ancient Greece during the millennium of the European Dark Ages. Later, by contrast, he refugees from economic and political degradation in contemporary Muslim countries arrived in Europe as uneducated laborers who, along with their children and grandchildren, occupied slum ghettoes that were uniformly Muslim, albeit of varied national origins. In some instances there was a colonial connection between their places of origin and of refuge, and that connection fomented bitter nationalist struggles. France became home to North African Muslims from its former colonies; England had already opened its doors to former colonials now emanating from the South Asian subcontinent as well as the Caribbean and the Middle East. Large numbers of Turkish *Gastarbeiters* were in Germany and the Scandinavian countries. In each of these countries, a different pattern was applied for resettling immigrant populations. These respective patterns reflected the political expectations of the host government for the group's incorporation.

Germany's model was segregation, reflecting the expectation that there would be no assimilation: the immigrants would not become naturalized Germans. In France the emphasis was on assimilating and homogenizing immigrants with the indigenous French. However, that scheme failed to take into account that Muslim immigrants were not only a formerly colonized population, but also the winners in the anticolonial war, who were quite resistant to French iconography. For example, France has national martyrs who represent the union of the populace in wars for French dignity and sovereignty. But there is no martyr icon for the French Algerian War, which cost more French lives than did World War I. In Holland there was an idealistic view in which all the ingathered former colonial subjects and the persecuted immigrants from Africa and Asia would integrateinto the Dutch population under conditions of liberal

democracy. A large number, however, didn't come to Amsterdam for liberation from their rigid religious orthodoxies.

No less important is the attraction for second-generation immigrants of a positive identity—an identity conferred by the very circumstance of their difference from the indigenous population that has subordinated them, restricting them to inferior jobs and housing. Many European minorities revive their old cultures and languages in the course of asserting their uniqueness preserving their identity. This is particularly the case in nationalist struggles such as Northern Ireland, Kosovar Albanians, Bosnian Muslims, and Chechen nationalists. But the current second and third generations of Muslims in Europe time-warped back 600 years to propose as most attractive the reestablishment of the Caliphate. Not coincidentally, this is the rallying cry for Osama bin Laden.

Their legend of the Caliphate and aspirations for a revival are antagonistic toward modernism and toleration. Their alienation has been fomented or mobilized by imams of Salafi Islam, the least tolerant and most radical opponents of modernism. This philosophy, in turn, breaks into several subgroups, one of which is Salafi Jihadists. Among these are the *takfiri*, who can remove all signs of Islam from body and behavior in service of jihad. Thus, the 9/11 bombers were able to drink in bars, shave their faces, and eat non-halal food to blend into the majority population when it suited their jihadi purposes. The same ethic is invoked to allow women to become suicide bombers. It is in fact an ideology rather than a theology.

For jihadis Iraq is the most immediate training ground because it pits "infidel occupier" against a "captive" Muslim population in a Muslim land. Jihadis recall the Crusaders of 600 years ago, including Richard the Lion Hearted, who invaded primarily Muslim territories in southern and eastern Europe en route to Jerusalem. Reiterated and memorialized, this piece of history permits a parallel rationalization for contemporary vendetta.

One of the persistent questions about the recent spate of suicide bombers is their level of education and assimilation into European culture. The assumption is that suicide-homicide or martyrdom killings are the last-resort behavior of young, uneducated, and economically disadvantaged men who lack the resources to deal with a technological, sophisticated modern society.

It is true that many of the Shia suicide bombers in Lebanon in the 1980s were drawn from these social ranks. It is also the case for the first nine homicide-suicide bombers from Gaza who acted during the period of the Oslo accords. But that demographic has changed during the second Intifada and among the ranks of recruits to Al-Qaeda and related organizations. Many of the suicide bombers have completed undergraduate and graduate work. Their education in technology does not intrude or challenge bedrock belief systems, as an education in the humanities and social sciences might do.

To understand this change one must look both to developmental psychology and geography.

The early followers of Muhammad were subjected to persecution much as the early Christians and Jews. Every clan that contained Muslims subjected them to torture and death to force them to deny the supremacy of Allah. This martyrology, particularly noted in the death of Husayn, grandson of Muhammad who was martyred by the dominant Sunni religious establishment. He is the penultimate martyr of Shia Islam and an icon for acts of martyrdom, notably suicide-homicide. Death on the path to declaring the supremacy of Allah is, for many Muslims, martyrdom. Education in Islam includes this knowledge, these icons, and these ideals.

In the late 20th century, the economic lure of western Europe, with its recent history of colonial occupation of land masses with large Muslim populations in Africa, Asia, and southern and eastern Europe, brought guest workers and illegal immigrants eager to partake of prosperity and freedom. But what they find, besides low-paying jobs, is an atmosphere of discrimination. Particularly painful to North African Muslim immigrants in France is the political denial of their suffering in the Algerian War, which their parents and grandparents fled as refugees. Immigration of Palestinians and Lebanese contributed fuel to the rhetorical flames about Jewish (Zionist) occupation of Muslim lands.

Studies of immigrant populations indicate that while the best adjustment to their new environment is reported by immigrants living in close proximity to their expatriate group, the children of immigrants in the United States and in Europe have tended to have a significantly higher incidence of delinquency and adult criminal behavior than their parents' generation and indigenous age peers.[28]

My own studies indicate that alienation from the institutions of the host society and recognition that their family is external to the access trajectory for success in those institutions provides the breeding ground for violent behavior. Limited opportunities to participate in the machinery of power—legislative bodies, courts, administration, elected and appointed officialdom—restrict development of political efficacy. Political inefficacy truncates the development of moral judgment. No less important to second-generation immigrants is a positive identity—an identity conferred by the very circumstance of their difference from the indigenous population that has subordinated them, restricting them to inferior jobs and housing.

TRAUMA, TORTURE, AND POST-TRAUMATIC STRESS

It is significant that the overwhelming majority of Muslims in Europe are not seduced by appeals by jihadis, and that those who are, regardless of their level of education and social status origins, are (according to their own final martyrdom

statements) motivated to vendetta for either primary (victimization) or secondary trauma-identification with victims. Some theorists on the motivation for suicide-homicide have focused on the experience of the perpetrator as a torture survivor or a close family member of a victim of the opponent's predations.

Particularly dramatic examples are the Black Widows of Chechnya who embarked on suicide-homicide actions in Russia. They are women who allegedly lost their husbands and brothers to the predations of the Russian army in Chechnya. The several Palestinian women who attempted or succeeded in suicide-homicide missions are also reported to have lost close relatives either in Israeli Defense Forces (IDF) assassinations or in fighting the IDF. Generally women suicide-homicide perpetrators are likely to have suffered primary rather than secondary trauma as the instigation of their choice for suicide-homicide.

But this was the case for neither the 9/11 nor the 7/7 suicide bombers. Also notable are the social class and educational background of the 9/11 suicide bombers, 15 of whom came from Saudi Arabia, where they had education and more-or-less middle-class family backgrounds. If they experienced primary trauma, it was when they volunteered to go to Afghanistan. But they were exposed to secondary trauma through the recruiting materials used by Al-Qaeda that feature scenes of Palestinians attacked and killed by the IDF. Now, of course, the photos and videos of the infamous Abu Ghraib prisoner abuse have become recruiting posters, videos, and repetitive media features in the Arab world. Basel Saleh studied the demographics and traumatic experiences of 219 male and female political activists in Islamic Jihad, Islamic Resistance Movement, and Al Aqsa, between 2000 and 2003, and found that there was a significant history of trauma inflicted by the IDF. But of the 214 "martyrs" in his demographic analysis, the majority were in their 20s, and all were affiliated with one of the three organizations before their mission. Their occupations ranged from unemployed laborer to teachers in Islamic universities. Individuals assassinated by the IDF are also identified by their organizations as martyrs. One of the confounding issues in identifying an Islamic martyr psychology is that in Islam, unlike Christianity or Judaism, the amorphous "death on the path to Allah" doesn't distinguish between heroes and martyrs, fighters and the pious. Those who were middle class were more often killed by assassination, while most of the younger casualties were less educated and worked at occupational levels. On the other hand, my own study of nine Palestinian suicide bombers who killed themselves between 1990 and 1999 during the period of the Oslo accords indicated that their trauma was primarily secondary—through identification with travesties of the occupation and religious commitment to martyrdom.[29]

Normally, this stage of moral-legal development occurs between ages 13 and 19. In a peaceful egalitarian society, late adolescence is the beginning of the stage of universal justice—that is, right and wrong are considered universally applicable regardless of individuals' relationships with each other or affinity or identity group. But the earlier stage of retributive justice is not merely a desire for vengeance consequent to experiencing violent trauma. It is also predicated on the affinity group relationships and identity groups' social valuation. It is particularly likely if the victim of violent trauma is an adolescent or young adult male in a patriarchal culture. Gang warfare easily becomes intercommunal violence. Less often recognized is the impact of secondary trauma that is generated through identification with a victim by reason of affiliation, race, ethnicity, or communion.

The Martyrdom Ethos Is Generated through These Two Levels of Trauma

In an earlier study of primary and secondary traumatization, I found that Palestinian children who had not personally witnessed the massacres at Sabra and Shatila in 1982 identified so completely with the event and the victimization that they reported experiencing bombings and killings and had nightmares about their parents being massacred and themselves confronted by armed soldiers. They evidenced symptoms of post-traumatic stress, as did the children who were in those places at the time of the massacre. This secondary traumatization during childhood and adolescence fuels vendetta and truncates the development of moral judgment in the stage of retributive justice. This is the dynamic that in adult members of terrorist groups is manifested as righteous indignation.

If we examine Muslims in Europe who have engaged in suicide-homicide through this paradigm we find all of the elements of the cycle: fear into hatred into violence. The fear is fear of victimization—physical, political, and discrimination experienced as an immigrant. Hatred is too often reciprocal and enacted as violence, as exemplified in race riots and the cycle of retaliatory violence following the murder of Theo Van Gogh, for example.

Historically, social class and level of formal education are more likely to yield a positive correlation with positions of leadership in a revolutionary group. Neither these indices nor the indices of psychological normality and intelligence are the conclusive determinants of emotionally driven moral choices. Instead, these alternatives are mediated by experience. Behavior is chosen (motivated) from the iconic brain images in the circuits of affective memory.[30]

DETERMINING DEVIANT BEHAVIOR

Young people who commit suicide and/or homicide are choosing a center-stage role for themselves. Whether the ultimate objective is fatalistic or altruistic, the individual believes that the future depends on him or her and the incipient act. All who join a terrorist organization make a commitment of their lives and fortunes to the shared project. This is much the same as the volunteer to military service. The latter expects training, discipline, and esprit de corps. Unlike the perpetrator of suicide-homicide, the military volunteer envisions the future with *himself or herself in it.* The soldier's commitment is to the institutions of the prevailing society, of which the military or security institution is a vital conservator.

Nevertheless, there are similarities in the training program. Foot soldiers are trained to take orders and fulfill their mission. However, a soldier fights for his comrades in arms and counts as a victory the mission in which his group fought bravely and survived. Military training also deplores civilian casualties. In fact, post-traumatic stress disorder or combat stress disorder is often triggered by killing innocent women and children. Diametrically opposite, the terrorist trainee lives entirely in an "us/them" framework. A "good" death is killing "them." A "bad" death is one inflicted on us by them and demands vengeance. When terrorists identify themselves and prospective membership with commonalities in religious or national origins and seek iconic status through attacking "the oppressors" and "the impure," they are able to rationalize the death of coreligionists by the latter's collaboration. National armies rationalize deaths of civilians as "collateral damage."

In the earlier days of suicide-homicide through the Hezbollah in Lebanon, martyrs were promoted like rock stars are in the West. They made death films, photos on posters, and cassette tapes that would get played on broadcast media. Similarly, in the Palestinian cases, suicide-homicides achieved instant fame and their families received payment of death benefits and celebrated the holy death. Since martyrdom is accorded as well to those who are killed on the path to Allah, many killed by the IDF were celebrated as martyrs. It was commonplace in the apartments of Palestinians in Sabra and Shatila in Beirut to see these posters commemorating and celebrating a close relative who was killed at the Munich airport after participating in the massacre at the Olympic Games. There is no question that such representations had inspirational impact on the young. To ensure the direction of the impact, a younger brother of the deceased would often take his name. In a society in which millions live in anonymity and anomie, this fragile glimmer of eternal recognition exerts a powerful appeal.

There is another essential difference between an army and a terrorist organization. The former recruits and trains persons who have reached the age of consent. The latter may well commence training in childhood, or junior

organizations, but will accept as recruits for martyrdom missions volunteers of whatever age, preferably steeped in their ideology but not necessarily tested for the depth of their knowledge. Such recruits are for a single mission and need few qualifications apart from ideological commitment. They do not receive lengthy training in terrorism or undertake a series of missions of varying tasks.

More experienced members of terrorist organizations with skills like bomb making and finance become too valuable to become martyrs by suicide missions. In fact, the trajectory of a suicide bomber within an organization is relatively brief. The usual scenario is that a prospective suicide bomber joins a terror organization in order to fulfill that objective.

Psychologists and psychiatrists providing services to people living in communities with high incidence of recruits, such as Gaza, emphasize the demographics of poverty and hopelessness as motivating factors and traumatic experiences as the triggering factor.[31] As of this writing there are two primary sources for diagnostic determination, and neither is clinically acceptable. First, there are postmortem interviews based on psychological tests administered to close family members and friends of the deceased. These are presumably predicated on norms for the population. The other method is through clinical interviews with suicide bombers who have been intercepted by the Israelis and jailed.[32]

Finally, journalists recently began doing interviews of suicide-bombers-in-training volunteered by their organization press offices or handlers.[33]

All of the data when subjected to story sequence analysis motivation index indicate that these men and women are not motivated by pathology but have rationalized their chosen pathway to notoriety and eternity in total disregard for their victims. Or perhaps by prejudging their intended victims as evil and a danger to their identity group, they rationalize their target population. The rationalization thesis seems to be that dying for the cause is holy and good. The death of others caused in pursuit of "our cause" is trivial and justified by the overriding importance of the cause. But how is this different from the gang members who in the course of their gang wars kill innocent people who happen to be in the way?

As individuals, those who turn to deadly force as the only alternative are not necessarily diagnosable as social deviants, criminals, intellectually marginal, or even as fanatics. They are often more concerned than their peers with right and wrong and with justice.

THE FORENSIC IMPLICATIONS OF FLUID BOUNDARIES OF ABNORMALITY

In presenting a mental health defense and/or a mental health mitigating circumstance, it is a struggle to try to somehow "fix" what are very fluid boundaries of diagnoses of abnormality. This comes to the fore when dealing with culprits

such as Timothy McViegh, Jim Jones, David Koresh, and John Muhamed. Each of them was responsible for multiple deaths and either died with his victims or gave himself over to capital sentencing to be put to death for his crimes. Minimal psychological evaluations and postmortem psychological assessments revealed no recognizable pathologies. Certainly there was nothing that might have led to a finding of not guilty by reason of insanity. For lack of anything more sub-stantive, they are consigned to the diagnosis, "sociopath or character disorder." But had these men been studied before their mass killing event, would they have been found outside the norms on intelligence, personality, and other tests? Would they have profiled on the MMPI as significantly high Pd scores? The fact is that many of the responses and conditions of early life that place a respondent into that category are commonplace in poverty, domestic violence, poor family interactions, alcohol and other substance abuse, and membership in a victim-ized minority group. The Hare Psychopathy Checklist-Revised (PCL-R) is an example of a test frequently used in forensic settings to determine the likelihood that a felon has potential for rehabilitation or is simply a sociopath. Scoring is adversely affected by all of these named sociodemographic circumstances.[34] As for intelligence tests, it is easy to understand that members of minority groups—either by dint of language or ethnicity—would not respond satisfactorily to the culturally biased vocabulary questions on a standard individual intelligence test, and that if they are not familiar with solving matrix puzzles and/or conceptual-izing a three-dimensional object as a two-dimensional drawing, would have a terrible time on the nonverbal tests of intelligence. And so it goes.

All of this brings us to questions raised by many generations of students of psychology: Isn't killing an abnormal act? Isn't suicide an indication of a dis-turbed personality? And finally, would anyone in his or her right mind choose no resuscitation and no extraordinary measures in a life or death medical crisis? The answer to the last question may be extended to the other two questions. The implementation and legitimacy of a Living Will presumes that a human being can choose to die. *When*, then, is killing an abnormal act?

We know that damage to the frontal and temporal lobes, particularly on right side, can result in impaired judgment and impulsivity. Mature moral judg-ment is a function of the frontal lobe and is presumed to be undeveloped until that part of the brain reaches adulthood. Neuroscientists have demonstrated that damage to the frontal and temporal lobes is one of the three character-istics of multiple killers.[35] In federal law and most state laws in the United States and in Europe, an individual with a subnormal IQ and/or an individual incapable of reasoned judgment cannot be assigned a death penalty. But on the other hand, an elderly person can be ruled incompetent to handle his or her own funds or make personal choices if the individual is diagnosed with

dementia. That diagnosis is made apart from psychological tests, on the basis of behavioral observations. We would like to believe that a diagnosis is a scientific statement and not a subjective estimation. And perhaps in the case of an elderly person suffering dementia it is. But for the disaffected youths recruited into terrorist organizations, there is a normalcy that is abnormal. Very much like the American immigrant youths who become gang members, the disaffected young Muslims of Europe, also second-generation, drift into radicalism under the blind eyes of parents who are often perplexed on parenting these children born in freedom and relative affluence. These parents are likely to be working very hard at whatever jobs or enterprises they can command convinced that making money will provide everything that is needed for their children's success. Clearly, the model of their own, traditional upbringing is not appropriate for this urban modern environment.

The Leeds bombers are typical of these young men. According to the report about them in *Time* magazine, they drifted into "groups whose zeal and camaraderie offer a sense of purpose."[36]

Often it is a youth outreach center or a radical Islamist Inam. When their talent and enthusiasm for jihad are recognized, they are offered travel to Pakistan and Afghanistan for training. Sometimes they have been offered missions in Palestine and die blowing up themselves and others in a Tel Aviv nightclub. Usually parents and neighbors haven't tracked a particular pattern, but in retrospect they recall the youth having gotten into racial fights at school or showing proclivities for religious orthodoxies. Ironically, it may be parents who, ,trying to settle a rebellious son, mistakenly blame his problems on "modernism." They send him back to Pakistan to a madrassa to learn Arabic and the Qur'an and discipline.

THE TERRORIZING EFFECTS OF NORMAL TERRORISTS

The sheer irrationality of a terrorist attack is what traumatizes the subject population. When the terrorists come across to their target population as normal, they become individuals with whom their victims can sympathize or even empathize (as is theorized in the Stockholm Syndrome).[37] Anne Speckhard in her paper, "Soldiers for God: A Study of the Suicide Terrorists in the Moscow Hostage Taking Siege," notes the following example:

> Given the general Russian attitude toward Chechans, it is interesting that the Stockholm effects were so pronounced . . . Indeed, the Chechans were willing to die and take the hostages with them if necessary, but were also individually kind and relational with their hostages so much so that afterwards their hostages felt grief and pity for them.[38]

She also notes in writing about women suicide bombers generally that:

> In terms of producing the desired effect of terror, female bombers are likely more potent in this regard since they defy all traditional stereotypes of women as nurturing, sympathetic and kind.[39]

This raises the question of societal norms themselves. At the same time we recognize that there are relative norms for behavior in various social roles. We recognize this with remarks such as "Well, mothers are like that!" or "What else could you expect of a teen-ager?"

Thus, when an evangelical preacher of any sect exhorts his or her followers to murderous hatred against an out-group in their midst, some may tend to accept this is normal behavior and fail to recognize the zealotry and fanaticism that are intrinsic to an act of terrorism. In a society in which there is a historic and political link with the psychology of xenophobia, such fanaticism is incorporated within the bounds of the social norms. At the time of this writing, the United Kingdom is considering enacting laws to criminalize "incitement to hatred" when it is perpetrated by a nonnative radical Muslim imam. Hate speech and publication have been banned in Germany since the establishment of the Federal Republic of Germany following World War II. Similar measures are under consideration in The Netherlands and France. Ironically, no such consideration was applied in the case of the Reverent Ian Paisley, who is presently a member of the European Parliament despite his acts of hate speech. Similarly, a century ago, in the pre–Civil War United states, no such legal measure impeded fanatical antiabolitionists such as Wendell Phillips and other Garrisonian abolitionists who inspired the terrorist tactics of John Brown and of Nat Turner. Clearly, it is a matter of the societal norms and political hegemony for enmity. Adolf Hitler, against the backdrop of a liberal democratic Weimar Republic, was able to incite xenophobic hatred of such proportions as to set off a war of conquest and the Holocaust. He and his political philosophy established an us/them psychology. It incorporated a good death/bad death ideology without room for moderation.

While we would like to believe that this dynamic can only be established when there is preexisting climate of fear and intolerance, the pre–Civil War abolitionists, with their zealotry for democracy, and Ian Paisley's fierce anti-Catholic and anti-Ecumenical rantings against the World Council of Churches, actually helped to create a climate of fear not much different from the Reichstag fire of 1933 that established Hitler and the Nazi Party as the Third Reich.

When terrorism achieves its intentions, the target society is vulnerable to the politics of fear. Societal norms on acceptable behavior—or what is normal—change.

There is further evidence of this normalization in the data on suicide bombers demographics from the beginning of the Palestinian bombings to the present phenomenon in Iraq. The marginality of the early suicide-homicide bombers, both demographically and psychologically, contrasts with the many volunteers from throughout the Muslim world who are volunteering for these missions in Iraq. In even stronger contrast is their move to relative anonymity—no more video- or audiotaped messages of farewell. No more photo posters with background icons of the Dome of the Rock or Al Aqsa. In short, the normalization of the abnormal is being completed.

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Culture in Psychopathology— Psychopathology in Culture: Taking a New Look at an Old Problem

Juris G. Draguns

THREE ILLUSTRATIONS

Tim is a 24-year-old graduate student in biochemistry at a prominent midwestern research university. Characteristically ambitious, energetic, and productive, he has not been himself lately. His professors and peers have noticed a kind of indifference, bordering on apathy, in the laboratory, in seminars, and in casual social give-and-take. His friends are at a loss to account for this change, except that, as some of them recall, it started rather rapidly, after a couple of academic and social setbacks. The paper he had worked on for three months, his first solo publication, was peremptorily rejected by a refereed journal. And he could not hold his own in arguments and debates with an exceptionally brilliant and articulate new graduate student. His girlfriend's support and encouragement were now increasingly mixed with criticism and sarcasm, or so Tim thought. At one time, he suddenly burst into tears between classes. A short hospitalization and prescription for antidepressants followed, and cognitive-behavioral treatment was initiated. Diagnostic interviews revealed a guilt- and doubt-ridden young man who was blaming himself for promise unrealized and potential wasted.

Shiro is a 26-year-old junior executive in a major corporation in Japan. Married a year ago, he is the father of a baby girl. His ascent from a lower-middle-class

family was a model Japanese success story. Groomed for admission into a prestigious university from his preschool days, he studied hard through grade and high school, eschewing idle pastimes. He passed the entrance examination to the university of his choice with flying colors. Upon graduation, luck smiled on him again. He was selected as an executive trainee by a prominent Japanese company with the prospect of lifetime employment and steady promotions, and his superior took a liking to him. He was singled out for praise, but also assigned responsibilities. Sooner than many of his peers he was included in the obligatory late suppers with entertainment for company's suppliers and customers. Returning home on the last train, he had to be ready to start early the next day. He married an attractive and charming young woman of a more prominent social background than himself. There was little time for courtship or romance or the development of an intimate relationship. He barely saw his new daughter, although he constantly thought about her. One day, he overslept. Once he got up, the whole world looked dark to him. Catching the commuter train was out of the question. Deeply depressed, he was treated with a combination of antidepressants, Japanese residential Morita therapy, and cognitive-behavioral interventions. He spoke little, but complied conscientiously with all treatments. Occasionally, he was heard to mutter: "I've let them all down. I've failed them miserably." "They" included his wife, but more prominently his parents, who had sacrificed so much for the sake of his education and career, his mentors and tutors at different stages of his life, his supervisor, who had pinned such high hopes on him, and even the company president, whom he had met once for a handshake.

Barnaby is a son of a family of moderately successful shopkeepers in Lagos, Nigeria. Devout Evangelical Christians, his parents instilled in him a sense of duty and an ethic of self-improvement. Graduated from a secondary school with fairly good grades, he quickly got married and became father of three children. Working at a succession of clerical jobs, he attended night school to improve his English and to qualify for a coveted entry-level position in the civil service. At age 25, he seemed on the verge of attaining his goal when, while studying for an important test, he lost his ability to understand what he was reading. Language was not an issue, but words remained unconnected in his mind, sentences did not add up, and paragraphs had no meaning. At the same time, headaches and a sense of general physical distress overwhelmed him. Examined at a modern medical center, he was found to be free of neurological disorder, and no standard psychiatric diagnosis appeared to fit him. Informally, Barnaby and others called his condition "brain fag" and attributed it to his having worked too hard. Antianxiety and antidepressant medications brought some relief.

Barnaby and his parents were utterly unresponsive to the suggestion by one of his physicians that he seek psychiatric consultation. Traditional African healing methods were briefly considered, but Barnaby's family rejected then as "unchristian." Instead, reliance was placed on prayer, which brought about some symptomatic improvement.

SIMILAR CHALLENGES, DIFFERENT RESPONSES

Three ambitious, hardworking, upwardly mobile young men who found themselves entangled in the pursuit of their goals! The challenges that they faced were more similar than different, but the distress and dysfunction that they experienced bore the earmarks of their respective milieus. American individualistic culture rewarded Tim for his successes and held him responsible for any hint of imperfection or failure. He internalized these values, measured his progress by the most demanding standards, and felt self-loathing when he found himself short of his objectives. His blame was concentrated on himself, and the discrepancy between what he was and what he should have been was experienced most painfully. Shiro, too, saw his dreams disintegrate before his eyes. Yet his sense of inadequacy was not focused upon himself, but upon his parents and mentors whom his failure, he thought, had so grievously disappointed. His sense of obligation was directed at specific people, and it was their sorrowful, reproachful glances that he dreaded to imagine, yet was unable to banish. Barnaby's distress was more globally and organismically experienced. Apparently, it was not pinned to either himself or his significant others. Yet it was felt most painfully, perhaps because of the helplessness in being unable to correct, control, or make sense of his predicament. In contrast to his counterparts in the United States and Japan, Barnaby faced another problem. Three systems of conceptualization and care were available to him, and yet none of them quite fit him. That was true of modern secular scientific resources, traditional African approaches, and Christian religious practices.

THE PROBLEM

In what ways and to what extent do people differ across cultures in responding to stresses and challenges of living, especially when they cannot cope with them adequately on the basis of their experience and resources? This chapter will seek to provide answers to these questions on the basis of clinical observations and research findings that have been accumulating ever more rapidly in the course of the last few decades. To this end, the two pivotal terms in this chapter must be defined.

KEY DEFINITIONS

What is culture? An elegant classical definition by Melville Herskovits equates it with the environment that human beings have created.[1] Emphasis in this pithy statement is placed upon artifacts, from hand tools to computers and from huts to skyscrapers. However, it is implicitly recognized that the environment to which this definition refers is both external and internal. In particular, the aspects of culture that are crucial in the context of this chapter are to be found within rather than outside human beings. Tseng[2] focuses upon "the unique behavior patterns and lifestyle shared by a group of people which distinguish it from others" as the defining features of culture. Moreover, in Tseng's formulation, culture encompasses "views, beliefs, values and attitudes," as well as "rituals, customs, etiquette, taboos, [and] laws" (p. 5). As Ember and Ember[3] assert, culture is learned, shared, and transmitted.

These statements primarily pertain to geographically distinct and separate cultures in locations where all people speak the same language and abide by the same customs. In pluralistic cultures, of which the United States is perhaps the most prominent exemplar, people of a variety of cultures inhabit the same area, interact, and are mutually influenced. They share to varying degrees some core values and beliefs while retaining certain of their original or ancestral cultural characteristics. Investigation of cultural impact upon psychopathology in pluralistic cultures faces the challenge of disentangling the various threads of cultural influence.

Psychopathology as a concept encompasses the totality of mental disorders or mental illnesses. The fundamental criteria of mental disorder, as embodied in the current *Diagnostic and Statistical Manual of Mental Disorders* (fourth edition, text revision), or *DSM–IV–TR*,[4] are distress and disability, that is, personal suffering and impairment in dealing effectively with the challenges of daily life. The authors of *DSM-IV* and other experts[5] are adamant in sharply differentiating mental disorder from social deviance and from conflict between an individual and his or her society.

HOW MUCH DOES CULTURE INFLUENCE PSYCHOPATHOLOGY?

There is a virtual consensus that the expressions of psychopathology are not identical around the world. Disagreement, however, does arise when the extent and importance of these differences are considered. Are they fundamental or trivial, striking or minor?

Ruth Benedict, an eminent cultural anthropologist, maintained that psychological disturbance is a social category defined independently within each

culture.[6] One culture may exalt as its mystics and poets persons who would be considered crazy in another culture. Conversely, people admired and emulated as heroes within their culture might be regarded as seriously disturbed outside of it. On the other side of the ledger, Eric Berne has minimized the importance of cultural differences in psychopathology.[7] On the basis of his observations of institutionalized psychiatric patients in French Polynesia, he concluded that" clinically, cultural differences can be treated as mere dialects or accents of a common language; the Italian schizophrenic speaks schizophrenic with an Italian accent, and the Siamese manic speaks manic with a Siamese accent" (p. 108).

RESEARCH FINDINGS

Global Uniformities in Psychopathology

A series of large-scale multinational studies by the World Health Organization (WHO) greatly advanced the state of knowledge on the symptoms of schizophrenia throughout the world. In the initial study, in which schizophrenic patients at clinical research centers in Colombia, Czechoslovakia, Denmark, England, India, Nigeria, Russia, Taiwan, and the United States participated, seven virtually invariant symptoms were identified at all of the nine sites: lack of insight, flat affect, delusional mood, ideas of reference, perplexity, auditory hallucinations, and feeling of external control.[8] Follow-up observations two years later demonstrated that positive symptoms, such as delusions, were likely to disappear, while negative symptoms, such as flat affect, tended to persist.[9] Additional findings, gathered at 12 centers in 10 countries, bolstered the case for commonalities across cultures in prevalence[10] and in the number of stressful events.[11] Coordinators of this research concluded that schizophrenia occurred in all countries in which it was investigated and that rates of incidence were similar in all of the populations studied.[11] Moreover, there was no support obtained for the oft-voiced expectation, going back to Ruth Benedict,[6] that schizophrenic symptoms would be labeled and construed differently depending on the culture.

WHO teams have also investigated hospitalized depressed patients in Canada, Iran, Japan, and Switzerland.[12] They succeeded in identifying a set of six symptoms that were widely prevalent at all locations: sadness, absence of joy, lowered pleasure, reduced concentration, lack of energy, and a sense of inadequacy. In a more recent, comprehensive epidemiological investigation of rates of depression in 10 major cities around the world, Weissman and coworkers[13] reported that insomnia and lack of appetite were among the most prevalent symptoms at all of the research sites. These findings are consistent with the conclusions by several reviewers[14–17] who regard such

vegetative symptoms as sleep disturbance, poor appetite, and lack of energy to be the pancultural substrate of depressive experience.

Sequential research of a comparable scope has not yet been extended beyond schizophrenia and depression, so that our knowledge of universalistic features of other disorders remains fragmentary. In any case, no worldwide constancies have emerged in the 14-nation Collaborative Study of Psychological Problems in General Health Care,[18] nor, in light of Tseng's recent comprehensive review,[17] in several bicultural, multicultural, and multiethnic studies of anxiety disorders.

Cultural Differences in Psychopathology

Reports of cultural differences in psychopathology are much more numerous than demonstrations of uniformity, and they extend over a much wider range of psychiatric conditions. In the WHO projects, prognosis for schizophrenia was unexpectedly found to be better in developing countries, such as Nigeria, than in developed ones, exemplified by Denmark.[11] Another paradoxical result was the negative correlation between educational level and favorable prognosis for schizophrenia in developing countries, the exact obverse of the relationship between these two variables observed time and again in the United States and other economically advanced nations. Moreover, although the worldwide trend toward similar, convergent prevalence rates of schizophrenia is solidly established,[11] Murphy was able to identify a limited number of social settings characterized by unusually high or low rates of schizophrenia.[19] He then hypothesized that high rates of schizophrenia were in part caused by the patterns of confusing and contradictory messages from the community to the person—an intriguing, but as yet untested, possibility, Expressed emotion, however, has proved to be a fruitful area of investigation, and Indian schizophrenics were found to receive about half as many emotionally toned, disparaging communications from their families by comparison with their British counterparts.[20] According to Al-Issa,[21] hallucinations, a prominent symptom in schizophrenia, vary in their cultural meaning and are embedded in a cultural context. Thus, the choice of sensory modality, visual or auditory, is in part influenced by culture.

Two axes of cultural difference have been identified for depression. Somatic distress and vegetative symptomatology appear to loom larger in verbal reports and self-presentation of depressed individuals in Asia and Africa as compared to their counterparts in Europe and North America. Conversely, guilt has been found to be more prominently featured and more articulately expressed by European and North American depressives.[17] Moreover, self-accusations and self-blame by Japanese patients were focused on specific individuals whom they had allegedly let down or disappointed, while depressed individuals in

Germany castigated themselves for their presumed violations of abstract and absolute principles.[22] Abe[23] noted convergence between the personality traits of depressives in Japan and in Spain who, in both countries, tended to be hard-working, scrupulous, and orderly, in keeping with the characteristics of *homo melancholicus*, originally described in Germany.[24] Cross-cultural comparisons of depression are complicated, and were for a long time stymied by the difficulty of arriving at an intercultural consensus on the basic and intrinsic manifestations of depression. Marsella[15] and other reviewers have commented on the absence of terms equivalent to *depression* in many languages, even though descriptors for some of the components or facets of depressive experience may exist. Cultural complications in defining depression are further illustrated by the findings of the US-UK Diagnostic Project,[25] in the course of which apparent disparities in prevalence of schizophrenia and depression between London and New York were investigated. Upon application of standardized diagnostic criteria, differences between patients in the two cities virtually disappeared. What remained was the difference between diagnosticians, who can be regarded as their culture's agents, with a special proclivity for identifying schizophrenia in the United States and depression in Great Britain.

Less research-based information is available on anxiety disorders, personality disturbances, and various forms of dissociative experience. This paucity of findings is paradoxical because anecdotal observations and theoretical considerations argue for the importance of cultural factors in all of these syndromes. This very feature, however, increases difficulties in making symptoms of these conditions comparable. Besides, many of the varieties of personality disorders have only recently been incorporated into international diagnostic practices, and do not have the rich tradition and history of identification, observation, and treatment characteristic of schizophrenia and depression. Beyond specific diagnostic categories, emphasis on bodily distress appears to be a hallmark of psychopathology in many cultures. In China, Ots[26] succeeded in "cracking the code" of cultural communication of emotional states through specific somatic complaints. Associations between liver and anxiety, heart and anger, and spleen and melancholy were established in China. This implicit code was understood by doctors, and perhaps more dimly and preverbally, by the patients. Bodily symptoms of mental distress are both prominent and common in East Asia, India, Africa, and Latin America, and Kirmayer[27] cautioned Western clinicians lest they dismiss such reports as defensive and trivial. In fact, recognition of various bodily sensations that accompany stressful life experiences may bespeak perceptiveness and sensitivity.

Eating disorders, especially anorexia nervosa and bulimia, have acquired prominence and visibility in recent decades. Internationally, two trends are

worth noting. Anorexia nervosa, in particular, appears to be a syndrome of affluent societies.[28] Rarely seen in periods of widespread food shortages and little noted outside of Europe and North America, anorexia nervosa has experienced a spread to the affluent and partially Westernized segments of the population in China, Japan, and India.[17] Culturally variable aspects of eating disorders include idealized body image, emphasis upon slimness, and attitudes toward body exposure. These variables are affected by the global spread of Euroamerican standards, but are also mediated by traditional cultural attitudes. Anorexic teenage girls in Hong Kong, for example, are less openly preoccupied with gaining weight, but tend to complain of intolerable fullness in the stomach and distaste for food.[29]

Alcohol abuse is one of the most culturally variable mental disorders, both internationally and interethnically.[17] Chinese, Italians, and Jews have low rates of problem drinking, both in their countries of origin and in the United States as well as in other countries to which they or their ancestors have migrated. Common characteristic of these and other low alcohol-consumption groups is the manner in which alcohol consumption is regulated and socialized. Often, drinking of a small amount of alcohol is introduced at a festive occasion within the family context, and remains under parental supervision or control. Alcohol then serves as an adjunct to special events and social rituals and is more of a treat or food, rather than a means of bringing about mood change or surcease from frustration. In cultures and ethnic groups in which alcohol consumption is associated with self-assertion, rebellion, or release of normally suppressed emotions, the risk of alcohol abuse tends to be higher.[30] International comparisons of alcohol abuse rates and of amounts of alcohol consumption leave several questions unanswered. Among them is the contrast in the rates of alcohol-related problems between adjacent and culturally related countries, such as France and Italy and Korea and China.

Suicide has been investigated in relation to culture for over 100 years. Durkheim's pioneering comparisons of suicide rates across the states of Europe highlighted the role of social cohesion in preventing and of alienation in promoting suicide.[31] Durkheim's seminal ideas have received a great deal of support in the ensuing century.[32] The psychoanalytically based formulation, that suicide is the result of aggression turned against the self, has fared less well as a general explanatory principle, even though the dramatic increase of suicide in some regions torn by strife and racked by violence, such as Sri Lanka, is consistent with this explanation.[32] By this time, suicide rates are widely regarded as an indicator of unresolved social problems, tensions, and frustrations. Tseng and McDermott[33] have pointed out that national rates of completed suicide tend to vary less than rates of attempted suicide, which they consider the more sensitive social indicator.

In age distribution of suicides, four culturally distinctive patterns have been distinguished: continuous increase of suicide with age, characteristic of Czechoslovakia; increase in suicide rate up to a peak between the ages of 50 and 60 followed by a decrease, as found in Finland; a bimodal curve with peaks in young adulthood and old age, exemplified by Japan; and a unimodal distribution with a peak around the age of 20, observed in Micronesia.[17] These spikes point to periods of vulnerability in their respective cultures that may be kept in mind in developing prevention and early intervention programs.

Culture-Bound Disorders

Culture-bound disorders refer to recurrent patterns of behavior that are recognized as disturbed in the cultural settings in which they occur, are distinct in their manifestations from the disorders included in the international, historically Western-based, diagnostic categories, and are typically encountered in circumscribed geographic areas or culture regions. Within their cultures, culture-bound disorders are explicitly named and labeled. Their etiology tends to be explained in culturally meaningful terms. Typically, but not always, culture-bound disorders are dramatic, acute, and reversible. A glossary of 25 such syndromes is included in *DSM–IV.*[4]

Amok refers to episodes of hypermotility and dissociation that culminate in homicidal outbursts.[34] People are attacked at random, without any detectable motive. Amok runners are heedless of danger to themselves, and not uncommonly precipitate their own death. Young men of precarious social status and fragile self-esteem are especially susceptible to these eruptions; among women, amok is an exceptional occurrence. Typically, the amok episode is preceded by a slight or injury to one's pride, real or imagined. Community response aims to restrain the amok runner and to prevent harm to him or others. Frenzy is quick to subside, and a period of exhaustion, sleep, and stupor follows, from which the person emerges bewildered and depressed, with partial or total amnesia for the amok experience. Amok in its prototypical form occurs throughout Southeast Asia.

Homicidal rampages that bear various degrees of resemblance to amok have been reported in other regions. *Koro* principally afflicts young men in Southern China, Singapore, Malaysia, and Thailand.[33] Its cardinal symptom is the person's conviction that his penis is receding into his abdomen, frequently accompanied by fears of his impending death. Persistent worry, agitation, anxiety, and panic are experienced. Persons suffering from koro seek help from local healers and take traditional herbal medicine. Epidemic outbreaks of koro have occurred in the course of which hysteric symptoms overshadow direct expressions of anxiety.

Most of the koro victims quickly return to their baseline of functioning, and only a few cases become chronic.

In Japan, excessive shyness and fear of people assume the culturally distinctive form of *taijin-kyofushu* (TK), translated as *anthropophobia*.[34] Symptoms of TK include causing other people discomfort by body odor, blushing, or staring. In this respect TK differs from social phobia in *DSM–IV*, in which the overriding features are fear of rejection by others and avoidance of social interaction; TK engenders morbid self-consciousness, intermingled with embarrassment and shame. Consequently, spontaneity is inhibited and social interaction is severely disrupted, but not systematically avoided. TK primarily occurs in adolescents and young adults, with a three to one ratio of men to women. Patients with TK are treated with a gamut of interventions, from psychotropic drugs through behavioral therapy to verbal psychotherapy of several orientations. A distinctive Japanese approach, Morita therapy, involves highly structured time-limited residential treatment designed to distract patients from preoccupation with themselves or others. Conditions similar to TK have been described in Korea and China, for example.[35]

In Mexico, Puerto Rico, and throughout Central America and Caribbean countries, personal losses and catastrophic events precipitate an intense emotional reaction that is somewhat anticlimactically termed *attaque de nervios* (ADN) or an attack of nerves.[33] In its early stages, heat sensations are reported to rise from the chest to the head. The cardinal feature of ADN is loss of control over motoric, affective, and verbal expressions. Shouting, crying, and trembling are common, often accompanied by aggression in word or deed. Fighting in an apparently dissociative state may occur. ADN is often precipitated by death or separation from a loved one or by the threat or the experience of desertion. Middle-aged or older women with less than complete high school education who are not employed and are separated are at risk for ADN. Episodes of AND tend to be brief and self-corrective.

Bouffée délirante aigüe (BDA) is a diagnostic term in the official French diagnostic system. It refers to brief and reversible psychotic episodes marked by dramatic confusional symptoms. BDA is prevalent in West Africa and has also been encountered in Haiti and Cuba.[36] What sets BDA apart from the better-known psychotic syndromes is its good prognosis. Most experiences of BDA are transitory, and return to the person's premorbid functioning is the expected outcome, although recurrence is sometimes experienced. The onset of BDA is frequently triggered by dread, often related to the culturally shared beliefs in malevolent magic. BDA responds well to both traditional herbal remedies and modern psychotropic drugs.

Descriptive information on culture-bound disorders has been accumulating for over a century. Research effort has now shifted to the search for empirically based generalizations about the nature and variety of culture-bound disorders as well as their antecedents, concomitants, and consequences. The relativistic view accords central importance to culture in shaping these syndromes, and emphasizes the inherent difficulty and perhaps even futility of fitting these disorders into a worldwide classificatory grid. The proponents of the opposite, universalistic, conception consider all mental disorders to be fundamentally identical throughout the world and concede to culture only the external trappings of symptom expression.

INTERIM REFLECTIONS

The Current State of Evidence

In light of the findings reviewed, both worldwide uniformity and cultural variability of psychopathology have been demonstrated. A limited number of culturally constant symptoms have been identified in schizophrenia and depression. Incidence and prevalence rates for schizophrenia exhibit little variation around the globe. Definitive information on the rates of depressive disorders has been somewhat more difficult to obtain, as the criteria of depression vary greatly in space and perhaps in time. The old notion that depression is a hallmark of advanced or of Western civilization has been dispelled, although it would be incautious to maintain that the rates of depression are constant throughout the world. Epidemiological research by Weissman et al.[13] in 10 metropolitan centers in several countries has demonstrated that there is less cultural variation in the rates of bipolar mood disorder than of unipolar depression. However, some of the differences in the rates of depression appear to be counterintuitive and may turn out to be spurious. It is somewhat baffling to find that markedly less depression is reported in Beirut, Lebanon, racked by civil strife and violence at the time of the survey, than in a Paris that was free of major upheavals during the same period.

Evidence in favor of cultural malleability of psychopathological manifestations is a lot ampler. Questions remain about the extent and nature of this variation and its surface versus fundamental quality. What cultural characteristics do they reflect and at what angle of refraction? If the relationship between culture and psychopathology is stable and solid, it should be possible eventually to infer the prevailing patterns of disturbance from the characteristics of the culture. Conversely, knowledge of disturbance within a culture should make it possible to generate realistic inferences about its fundamental and prominent features.

Research Approaches and Directions

If culture affects psychopathology, as the evidence reviewed in this chapter appears to indicate, what dimensions or characteristics of culture are responsible for this influence? In a project of an unprecedented scope, Hofstede[37] identified five basic cultural factors, derived from multivariate research on values at the workplaces of 53 countries or regions. Hofstede's variables have been found relevant and applicable across several areas of psychology. Draguns and Tanaka-Matsumi[14] sought to extend them to the cross-cultural study of psychopathology. To this end, predictions pertaining to Hofstede's five fundamental axes of cultural variation were formulated. So far, a team of researchers from eight countries[39] was able to confirm predictions pertaining to individualism-collectivism by establishing that social anxiety was more frequent and intense in collectivistic countries of East Asia than in individualistically oriented countries in Western Europe, North America, and Australia. Hypotheses formulated in reference to the other four Hofstede dimensions, power distance, uncertainty avoidance, masculinity-femininity, and short versus long time orientation, await being put to a test.

How then is culture reflected in psychopathology? The answer to this question is to be sought through qualitative studies of subjective experience and in part, through the observation of culture-bound disorders. Kimur,[22] a phenomenological psychotherapist in Japan, contributed findings on the characteristic experience of interpersonality, so different from the self-contained and autonomous self, as revealed by his patients. Glimpses into personal experience that psychotherapy provides constitute invaluable raw data about internalized culture, especially as it is expressed in conjunction with distress and disability.

In 1904, Kraepelin, one of the founding fathers of modern psychiatry, published an account of his observations of mental disorders in Indonesia and Algeria that contains some prescient comments: "We may also hope that the psychiatric characteristics of a people can further the understanding of its entire psychic character. In this sense, comparative psychiatry may be destined to one day become an important auxiliary science of comparative ethnopsychology" (p. 231).[40]

UNFINISHED TASKS

Symptom as the Traditional Object of Investigation

To what extent has Kraepelin's vision been realized, and what, if any, questions remain unanswered? A lot of information has been amassed with the psychiatric symptom as the basic unit of comparison, usually investigated at two or more sites across national frontiers, geographic distance, and high cultural contrast.

This research strategy is exemplified by the WHO surveys of schizophrenia and depression[8–12] designed to provide a bird's-eye view of psychopathology around the globe. Moreover, the priority of the WHO research teams has been to identify the common core of the major psychopathological syndromes. Cross-cultural differences were noted and described, but were not the focus of these worldwide projects. In the process, the interpersonal and social context was overlooked, and this imbalance remains to be corrected.

The fact that the symptom is not the only source of cultural variation in psychopathology was recognized rather early, and three carriers of cultural influence were recognized: patients, diagnosticians, and community agents.[42] The last category encompassed all the persons in direct contact with the person presenting signs of distress or disability, in his or her household and beyond its walls in the community at large. Collectively, all of these observers, including the patient, participate in recognizing psychological disturbance, imposing a label on it, and initiating culture's corrective, punitive, compassionate, or curative response to it. To investigate and assess these processes, a more elaborate model has been developed.[43] It goes beyond observing and recording a patient's symptoms, inquires into their meaning from the person's as well as his or her family's and community's points of view, explores the patient's social identifications and identity, and specifies the family's and community's responses to the behaviors and experiences presented by the family. Thus, psychopathology is viewed not as a circumscribed occurrence, but as a social transaction that unfolds in time and involves several participants. The transactional point of view carries with it two implications. First, physicians, psychiatrists, psychologists, social workers, and other designated agents of the community can be studied as contributors to cultural differences in perception and identification of psychopathology, on the basis of a given culture's sensitivities and thresholds of tolerance. This was done in the case of the US-UK Diagnostic Project,[25] which provided important correctives in the understanding of the nature of differences in modes of experience and perception of the psychopathology in the community. Second and more fundamentally, recognition of transactions as fundamental in psychopathology has stimulated the development of research approaches for studying the manifestations of psychopathology in family, community, and institutional contexts by means of a variety of quantitative, qualitative, and mixed methodologies, as exemplified by Kleinman' work.[44,45] More generally, conceptualization and research on psychopathology and culture is moving toward the recognition of the inescapable complexities in this area of investigation. Within this framework, the impact of the external, cultural, and the internal, somatic, framework is incorporated and the gap between them is bridged. To convert these guidelines into systematic observations, shifting among and pooling a wide range of

research strategies is advocated, from worldwide surveys to thoroughly documented, in-depth case studies.

Rapid Sociopolitical Transformations

Consistent with the contextual point of view, it is expected that the cultural influence is not imprinted upon psychopathological manifestations once and for all, but that it changes with time, and especially so when social transformations are abrupt, dramatic, and far-reaching. The last two decades of the 20th century were particularly rich in such cataclysmic revolutionary events, from the unexpected collapse of the Soviet Union and its satellites to the dismantling of apartheid in South Africa. It is unfortunate that any impact of these developments on psychopathology has largely gone undocumented. An exception is the observations by Russian psychiatrists, Korolenko and Dmitriyeva,[46] in Siberia, who reported that hypochondriacal and neurasthenic symptoms, prominent during the Soviet era, had markedly declined, and an upsurge of free-floating anxiety and of adjustment disorders had occurred, presumably in response to the sense of social and economic insecurity and consequent feelings of helplessness. On the other hand, in the wake of the Maoist Cultural Revolution, neurasthenic symptoms of diffuse bodily malaise, together with chronic fatigue, passivity, and lack of energy, were exacerbated in frequency in China.[47] Such manifestations were often encountered in individuals traumatized and alienated in the course of these upheavals. Skultans,[48] writing about the period of Soviet domination in Latvia, suggested that neurasthenic manifestations represented a form of inarticulate political protest and rejection of the externally imposed social reality.

Psychopathology and Culture: Direction and Nature of Links

The accumulated store of findings demonstrates that culture and psychopathology are interrelated, but what is the nature of the links before them? It has been suggested that psychopathological symptoms represent an exaggeration of modal cultural characteristics and are the caricature of their respective culture.[42] This hypothesis has received support in a study of both ambulatory patients suffering from anxiety disorders and their normal, psychiatrically undisturbed counterparts at six sites around the Pacific rim: mainland China, Taiwan, Japan, South Korea, Bali, and Thailand.[49] In the same investigation it was demonstrated that there was a greater similarity between the two Chinese sites, in Shanghai and Taipei, respectively, than between the other four samples, from as many countries. In another comparative research project that included both normal and depressive samples from Egypt and Germany,[50] significantly greater reliance on external locus of control was uncovered in both Egyptian

samples compared to Germans, without, however, an accentuation of these differences between the two depressive groups. Unexpectedly, however, Radford[51] reported that culture obliterated differences between Japanese and Australian depressive samples, while such differences remained pronounced between the normal control groups. Marsella[52] predicted that severity of psychopathology would produce convergence in symptomatology across cultures. In line with this expectation, schizophrenics in Nicaragua and Sweden were more similar in their defense mechanisms than borderline patients, who, in turn, were less different in the two countries than adequately functioning individuals with no psychiatric diagnosis.[53] Thus, the results are moot and the road is open to further explorations and to more refined and differentiated predictions.

On a semi-intuitive basis it would appear that there is the greatest degree of cross-cultural uniformity in rates in schizophrenia and in bipolar disorder. However, these results tend to coexist with substantial and meaningful cultural differences in modes of expression. Depression and anxiety appear to provide more room for cultural variation in both incidence and symptomatology, but specific conclusions about the manner and scope of such variation are premature. Specific symptoms, especially in mildly depressed or anxious people, are more likely to bear the stamp of their place and time, and fluctuations in alcohol or substance abuse, suicide, eating disorders, and interpersonal disturbance may come closer to being the psychopathological barometers of their culture or, in Di Nicola's phrase, "cultural chameleons" (p. 245).[28]

Psychopathology and Self: A Key Relationship

The self has emerged as a key construct in tying together personal experience and culture. In sociocentric cultures, the self acts as a bridge between a person and other human beings; in cultures where autonomy and individuality are emphasized, the self is surrounded by a boundary that separates that person from others.[54] Actual investigations of the link between culturally characteristic modes of psychopathology and self-experience have barely been initiated, even though measures of both variables are available. If such connections are established, they will shed light on the manner in which internalized culture is expressed through disturbed behavior and personal distress.

CONCLUDING COMMENTS

Psychopathology and culture is no longer a blank slate but neither is it a completed canvas. In light of the information presented in this chapter, cultural components of psychopathology are far from being trivial. Yet, a great many syndromes are recognizable in different regions of the world, although

they are not identical. Vegetative and affective symptoms of depression, general and specific expressions of anxiety, and components of cognitive distortion and disorganization associated with schizophrenia, all recur in disparate locations. Regardless of milieu or site, psychopathological experience and expression can be placed on four axes of appraisal:[55] (1) from high to low in affect or mood; (2) consensual and reality bound to idiosyncratic and unrealistic in the perceptual-cognitive domain; (3) from tense to relaxed in organismic experience; and (4) reliable or appropriate in social behavior, as opposed to unreliable or inappropriate. Subjective experience and social judgment determine the boundary between the normal and abnormal in any single case. Often, there are disagreements within the culture, for example between the person directly affected and his or her observers and associates. More frequently, the line between normal and abnormal is drawn differently across cultures. And yet, no culture stands idly by in the presence of extremes of mood, misperception, anxiety, or unacceptable behavior. In the psychological transaction that ensues, culture is expressed and reflected, and yet the unity of humankind is affirmed.

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How the Effects of Traumatic Experiences Are Passed "Unto the Following Generations"

Judith Issroff

The future belongs to those who give the next generation reason to hope.
Pierre Teilhard de Chardin[1]

Those who come in contact with traumatized people cannot avoid experiencing some of the overwhelming, "indigestible" feelings roused during the traumatic events. I call these inevitable onward transmission effects "affect contagion phenomena" because the emotions are spread directly, as in transmission of contagious infections, a domino-like effect.[2] Traumatized individuals affect those around them and also the communities and societies within which they live.[3–5] Onward transmission occurs not only directly but also indirectly, often with scaled up, exaggerated effects occurring remotely in time, place, and person that are understandable in terms of chaos theory.[2] In various ways these reverberations of traumatic experiences are passed on to subsequent generations when insufficiently ameliorated, contained, and worked through. All societies have developed strategies that serve as "cultural containers"[2,6–8] to deal with traumatic events: religious rituals, theatrical and other cultural and national happenings, and therapy situations are examples of cultural containers—communally sanctioned events where intense emotions may safely be expressed and played out in socially acceptable fashion. Individuals grieve, fantasize, and privately work through traumatizing experiences that have disrupted their inner and outer personal sense of continuity-of-being and disrupted their life-course function in

physical, social, psychic, cognitive, and spiritual ways in their personal private inner worlds, in their sleeping dreams, play, and creative compositions. Because they communicate powerfully, here diverse case stories are presented to illustrate the social and transgenerational problems encountered in traumatized individuals and the reverberations in their wake.[10,11]

No society can survive as a democracy when the numbers of those who are damaged and dependent exceeds the "containing" or "carrying" capacity of those who are healthy and mature.[12] Governments very rarely allocate adequate resources for the treatment and management of traumatized individuals. Children cannot be other than what their parents make them, and, as will be shown, the damage of traumatized parents is often unwittingly and unintentionally passed on their children.[13–45] Governments seldom budget to support parenting adequately. But dealing with trauma and quality of parenting are critical issues for any society, not only for humanitarian, moral, and medical reasons, but also in sociopolitical and economic long-term social cost-benefit effect terms. Just as it is dangerous for us to ignore the possible scenarios of global disaster,[46] unless basic reliable knowledge about how to foster healthy human beings capable of behaving in nondestructive ways with their environments and fellow human beings is given the respect it merits, society will pay a heavy price. It is within life-worlds, situations, occasions, and circumstances that calamity, when it occurs, takes intelligible shape that determines both the response to it and the effects that it has. Global warming and policies for mutually assured destruction (MAD) using nuclear weapons exist and require urgent attention. However material they may be, and however unpredictable or unintended, collapse and catastrophe are also social events, like coups and recessions, riots, religious movements, and our incapacity effectively to face human-generated problems locally and globally is clear. Geertz[46] advocates a monographic literature about particular disasters. This chapter presents such detailed case scenarios. The implications we can draw should help us to think about how we might try to build tolerant, healthy individuals and societies. In personal and planetary terms we are doomed if we cannot deal better with ourselves. Although natural disasters dramatically compel our attention, our own violence, our violations of our role in planetary ecology, our propensity to neglect and abuse each other, bring about our major preventable disasters and traumas. In this respect we should not avoid thinking about our own identity formation, difference, diversity, the role of dissidents and outsiders versus social pressures toward conformity,[47–49] and "groupthink"[50,51] tendencies. We need to cultivate our ability to perceive and tolerate paradox, to manage conflict, value and support traditional cultural containers and relief valves for safe expression of trauma-induced feelings. We also need professionals trained to cope with

the overwhelming, indigestible affects unavoidably raised by trauma[2] in order to mitigate the spread of such affect contagion phenomena.

Awareness of transgenerational transmission of traumatization has been with us since biblical times. We have long been told that the sins of the fathers are visited upon their sons unto the fifth generation (Exodus 20:5). Now evidence from many sources shows that the damage done to survivors of trauma is visited on their children and their children's children.[13–45,52] Further, a price is paid by the offspring of both victims and witnesses, and perpetrators.[19,32,33] The ongoing reverberations of trauma affect not only individuals, but also the life course of families, peoples, and nations.[53–58]

I suspect that it is the nonimmediate damage to the offspring of victims of traumatization and their relative strength that can often enable them to become vehicles for working through what their parents or grandparents had been unequipped to process. The mission or "transgenerational mandate" to remember and work through the trauma that parents could not deal with, along with the relative health to allow traumatically generated abscesses of memory to surface and drain, often falls on offspring. However, this happens only if environmental impingement is sufficiently in abeyance, and if the disruptive, foreign body–like introjects[37,62] of their parents' disturbances do not erupt within them too disastrously. It is no wonder that clinicians who work in relatively stable, affluent, democratic societies see so many second- and third-generation offspring of trauma victims.[2,3,63–87] In many societies family and tribal vendettas are legendary and ongoing.[88–102] We have to remember that while some think violent behaviour is largely learned, holding that humans are "polymorphously educable," "can learn virtually anything," and "among other things . . . can learn to be virtually wholly unaggressive,"[103] others view humankind as killer apes,[104] proliferating cancerously on Gaia, our planet.[105] Whichever view we hold,[106,107] no one can deny that violence is a monster that devours its own children. It does not solve anything; it only prolongs itself. It is the bedfellow of intolerance, ignorance, insecurity, threat, and fear. To the extent that recovery is possible, sufficient time without further traumatic life disruptions is necessary for pain and healing after destruction and loss. It is the healthy, secure, and sufficiently mature members in a group that contain the disturbed and damaged, that is, the traumatized, the rigid, the dogmatic, the intolerant and immature in their midst.[12] No society can remain open to diversity and contain its injured and malfunctioning individuals without eventually itself suffering severe and perhaps irreversible damage (e.g., Colin Turnbull's report of the Ik[108]).

Understanding what facilitates healthy development is integral to comprehending how traumatized people malfunction as parents and transmit beliefs, values, and coping styles.[5,109–125] Adaptive survival mechanisms, understandable

in originally life-fracturing experiences, may be inappropriate for current circumstances. *Loss and depression interfere with infant nurture,*[126–131] *child rearing and social integration.* Ongoing reverberations of trauma are especially severe in cases of childhood abuse, neglect, and exploitation.[52–54,123–129,132–136] Exigencies of situations in which survivors find themselves often necessitate involvement in life-rebuilding tasks. Working through of events is deferred. When behavior that ensured someone's survival becomes habitual it may be maladaptive, and preclude working through recrudescence of traumatic memories or grieving.

Still, traumatized parents do not necessarily pass on their trauma or act pathogenetically with their children.[79,132–134] Not every once-tortured father decides to "toughen" his daughter by extinguishing cigarette stubs on her bare flesh. Nor does transgenerational transmission of traumatization always lead to breakdown and illness: many survivors' descendents are in helping professions, or work as social and environmental activists. Their "compulsive caretaking" behavior shows their sensitivity to suffering. They work through personal legacies of parental trauma in valuable personal and social ways.

Dr. Jack Kevorkian assisted patients who wished to end their lives. He had lived through the genocide in which half the Armenian people died in all manner of brutal ways. At one point, he himself was starved. His struggle was devoted to allowing people to end their suffering in a humane fashion. Surely his ancestors' exposure to pain enhanced his personal sensitivity and gave him courage to confront such issues as quality of life and dignity of dying when pain is unendurable.

RECURRENT CYCLES OF TRAUMATIZATION

Traumatically generated attitudes, behavior, memory, and unassimilable feelings directly and indirectly retraumatize both survivors and those in contact with them, a contribution to the reverberating aftereffects of trauma. Not surprisingly, conflicts of previously deeply traumatized populations recrudesce into violent intolerant conflagrations, as, for example, in ex-Yugoslavia, Gujarat, India–Pakistan, and the Middle East.

Depending on the way one chooses to look at history, either wars periodically interrupt peace, or war is the more natural state, one intermittently in abeyance because of needs to recuperate, along with mankind's natural tendencies to bonding and cooperative interaction, without which we would not be here today.

Forgiveness? Vengeance? Coexistence? Different views are held about "an eye for an eye" or forgiveness,[135–137] whether or not violent behavior is innate or largely learned. Although relevant to understanding living with inter- and

transgenerational trauma, here neither these large topics nor detailed attention to mechanisms of onward transmission can be addressed.

Variations, malfunction, and/or deviations of the modes of healthy transgenerational development follow trauma. Healthy development in any particular social context is a huge topic.[109–125] Adequate personal and social development toward age-appropriate behavior reflecting health and maturity is an achievement not to be taken for granted. Multiple developmental factors and strands interact in complex ways. Knowledge about the process has increased exponentially.[128] Historically, child rearing consisted of almost ubiquitous neglect, abuse, and torture—reflected in high infant mortality rates until recently—and this is key to understanding cultural history, war, human violence, and cruelty.[53,54,55] An end to this terrible record of transgenerational transmission of trauma is possible in relatively humane, prosperous societies and has recently been expressed in various declarations of human, women's, and children's rights.

Does the impact of traumatic events impair a survivor's ability to enjoy life, to live creatively in a healthy state? Does that affect survivors' ability to enjoy and interact creatively with their offspring? What happens when appropriate emotional attunement,[130, 131] mirroring, and ability to sustain illusion, imagination, play, life-zest, and joy[109–112] are damaged? What happens when the environmental ambience necessary for positive nurture[113–119] is absent, deficient, or insufficient?

The preceding questions indicate some subtle but important components of parenting that are basic to children's health and resilience[114,120–122] in adversity. They are underemphasized in the literature.[63–93] describing the mechanisms by which the adverse after-impact of trauma wields its nefarious effects on subsequent generations and societies.

WORKING DEFINITION OF TRAUMA

Trauma is a disruption of continuity-of-being at any level—physical, intrasubjective, psychic, spiritual, or sociocultural. Accordingly, healing necessitates restoration of the sense of continuity-of-being by reconnecting to the pretraumatized state, memories, or condition.

Disruption arises from within, and/or outside the child when the social and physical realm impinges or when parenting is untimely, insensitive, remote, rejecting-dismissive, coercive or enmeshing, intrusive-disruptive, abusive, and/or inconsistent-teasing.

For nontraumatizing development, instinctual need has to be met within the child's capacity to tolerate need-frustration. Need-frustration can occur during absence of a specific significant other person, sometimes a transitional object endowed with specific subjective meaning to a particular individual child.[138]

An implication of this particular definition of trauma is that one of the prime tasks of parenting is to protect the child from any (avoidable) disruption of the child's sense of continuous-ongoing-being,[139] wherever the potential disruption arises.

Parents provide the social cohesion and contextual infrastructure of mind that enables human development in a particular culture. Socioeconomic, spiritual, and/or emotional states can lead to withdrawal from an infant: any pressing attention-diverting preoccupations adversely affect a parent's ability to be sufficiently attuned to an infant to respond to its needs in sensitive and timely fashion. Any peculiarities of the parent's mind-set and life-philosophy will affect the child's outlook. *Transgenerational damage occurs when traumatized parents malfunction and cannot meet their children's demands and needs to provide an appropriate facilitating environment for the maturational processes.*

Death anxieties or death instinct? Part of the legacy of generations of trauma? Like 99.9 percent of all species of life that have existed, humankind struggles toward survival or self-elimination in the face of natural or human-engineered disaster. Conditions that allowed the transgenerational working-through of traumatization have probably enabled the spread of improved childrearing, along with relative success of democratization, and technologies that have qualitatively improved living conditions in the developed world. Four-fifths of the collective world budget is spent on defense (armaments), while a mere fifth of what is spent on that amount could eliminate most of humankind's most obvious, pressing problems.[140]

Why is there such universal governmental disinterest in dealing with soluble problems that cause untold miseries, traumatize billions of people and their offspring? Why invest in and promote arms industries that will certainly add to the cumulative traumatization of mankind on earth and endanger planetary life itself? Is it death instinct? Or persistent fears and anxieties that are the legacy of generations of traumatization?

History, Psychohistory, and Childhood Abuse

Lloyd DeMause [53–55] documented the ubiquitously traumatizing history of childhood. His scholarly account of parents' historical neglect, exploitation, and brutal abuse of children is numbingly difficult to read, comprehend, and digest. Even today, abuse remains the fate of all too many children, even if they are not victims of long-standing generations of war or zealous madness such as Nazi Germany or China's Cultural Revolution, Pol Pot's Cambodia, Rwanda, or other societies in psychotic states or disintegration such as the Ik.[108]

We have to remember how relatively recent in the developed world are the reduction in infant mortality, the increase in longevity, affluence, liberation of

women, recognition of and legislation aimed at women's and children's rights, the abolition of slavery, and interest in developing reliable public knowledge about both what enables humans to develop in the direction of health, resilience,[121,122] and fosters salutogenic attitudes,[113,114] and about what happens, how, and why, to the development and function of offspring of traumatized, damaged, and suboptimally functioning parents.

A number of possible transgenerational transmission mechanisms have been described. Among these is trauma transmission from parents to children when early nurture is inadequate.

Grieving, bereft mothers who have suffered massive traumatizing losses, including their own sustaining environments, are often psychically concussed, preoccupied, depressed, and empathically numbed.[68,141] This occurs in abused women, refugees, immigrants, those living in conditions of strife, war, famine, those traumatized during the process of giving birth or ill. Their vulnerable, temperamentally difficult infants may adversely interact, aggravating dyadic relational problems.

Integration of several fields of scholarship enables us to comprehend how the very structure-functioning of the developing infant's brain becomes altered in conditions of maternal insufficiency or incapacity.[128] Subsequent ability to develop and interact as a compassionate, empathic, intuitive, "creatively alive" human being, capable of joy and "peak" experiences, is adversely affected. Sufficiently sensitive affective attunement.[111,112,117,119,125,130,131] within a secure, loving, not overly ambivalent nor enmeshed-coercive, nonimpinging, nonteasing attachment bonding situation is essential to overall healthy development.

This is not to overlook or underestimate the impact of later influences: The basis for vulnerability to later stresses becomes entrenched when the mother is unable to meet her infant's needs and then gradually fails over time to nurture in ways that are within the coping ability of her dependent, developing infant and child—that is, in nontraumatizing ways. The process of nurture becomes cumulatively traumatizing when it is insensitive and inadequate, as often occurs in grieving mothers.

Attitude and Resilience to Traumatic Events

A basic fault in her infant's development cannot be avoided by a distressed, traumatized mother or caregiver during the critical first two months of life's course. The infant's resilience will be adversely affected by these conditions.

Vulnerability is laid down in early infancy. Without overlooking the significance of any of the numerous other mechanisms identified that operate later in life's course and the life-trauma dialect, the environmentally derived,

enhanced vulnerability to later traumatization overrides resilience potential or compounds genetic susceptibility. Probably the commonest major mechanisms for transgenerational transmission of vulnerability to later trauma are perinatal problems that impair earliest interactions between infants and mothers.[109,111,112,118,125,130,131]

Trauma affects people in their totality: spiritual and physical dimensions of transgenerational transmission cannot be overlooked. Various factors coexist, interact, summate: teasing them out is no simple matter, as they influence each other over the life span.[79,80]

Space limitations preclude consideration and illustration of many modes of transmission, including physical mechanisms, the way family dynamics are affected by post-traumatic stress reactions and disorders, and so-called image-contagion phenomena.[45] All are important, as are the additional complex problems burdening survivors of human savagery. Nor can psychosocial implications be addressed adequately. Here I concentrate on one mode of transgenerational transmission of trauma commonly encountered: *transgenerational maternal depression; abuse, neglect, disorganized attachment patterns, and organized perverse abuse.*

We cannot properly relate to abstractions that dehumanize and distance us from the plight of the traumatized. I therefore present individual cases and then discuss politicosocial situations in the African context. Permission was given to discuss cases.

Mark

For eight months I daily treated a homicidal-suicidal 14- to 15-year-old adolescent. He was confused and experienced himself as without an identity when not switching persona, often without knowing he had done so. Like Mark, both parents suffered from dissociative disorders and disorders of attachment behavior.

Both Mark's mother's mother and his father's mother had lost their respective mothers during their pregnancies. Both his grandmothers had suffered severe postnatal depression. Both the boy's parents had been traumatized when they witnessed their mothers repeatedly humiliated and terrorized by unsupportive, brutal spouses—in father's case, also alcoholic. The unsurprising result was that both the boy's parents show bizarre, emotionally flat and/or inappropriate, unempathic, anxious-insecure, dismissive, sometimes rejecting, and extremely disorganized attachment behaviors. Mark was often punished by solitary confinement for endless hours in an unstimulating room. Both parents have neglected, emotionally abused, humiliated, and also abused Mark physically at times.

This potential terrorist's heroes were Timothy McVeigh, Charles Manson, and the Columbine School killers, until the advent of the "superheroes" whose destructive attacks on World Trade Center and Pentagon greatly excited him.

Mark has made several cold, vicious, calculated, unprovoked murderous attacks on unsuspecting persons in states of apparent calm while obsessed with fantasies about how to kill his own family members. His nightmares are gruesome and unrelenting. His only regret at being sent to a secure unit is that he may not be able to experience the power and control of actual murder to which he aspires.

Kimberley

Kimberley suffered transgenerational familial organized ritualized abuse. She and Mark were both hospitalized in a unit where I worked closely with several other complexly traumatized adolescents. Some further cases had also suffered perverse abuse and torture in organized, ritualized, terrifying groups. Like Mark, Kimberley was dangerous, unempathic, suicidal, and capable of vicious, destructive or even murderous behavior toward herself and others. Her incestuously abusive grandfather—who was possibly also her father—had told her she could never be rid of the blood tie to him. So, she not only cut through her own nerves and tendons, and later tried to dissect down through sensation-dead areas to find the biggest vein to slit to bleed herself dry, but also sliced other adolescents' wrists "to help them end their misery," provided Mark with a cigarette lighter to encourage him to burn down the hospital, and pushed a girl (who was hesitating to jump) over a railway bridge balustrade. Later she slit her own throat.

Like Kimberley, several aunts, uncles, and cousins, her mother had been abused by her father, the girl's grandfather. He raped Kimberley regularly from infancy, and was ringleader of the group who sadistically terrorized the girl and several other members of the family for years. Her mother, too, suffered from dissociative identity disorder (DID), compounded by alcoholism and other substance abuse. As in Mark's case (where sexual abuse was not an issue), this girl suffered from post-traumatic multiple personalities, the basis set in infancy by her abused mother's defective affect-attunement ability, postnatal depression, and lifelong rejection of her child.

Both youngsters are currently in secure units: their prognosis is extremely poor. Like their parents, they are affectively cold, out of touch to the point of being emotionally blind and deaf, unable to relate ordinarily or cross-identify with others. They suffer from feelings of unreality, of themselves and/or their surroundings, known as depersonalization and derealization, consequent psychosomatization, and they engage in self-cutting in attempts to experience themselves as embodied through pain and bleeding. Both are highly intelligent, but their thinking is distorted. Both hallucinate and suffer horrific nightmares.

They act out dangerously and impulsively, but also plan and execute cool murderous attacks on others and/or themselves. They are certainly capable of murderous social terrorism but have not been exposed to ideologies that might appeal to their psychopathological makeups and provide group support for directed terrorism. They are ambivalent, confused, and anxious in their attachment to their abusers. They both switch personalities and are aware of multiple selves. They suffer from psychiatrically accepted descriptive criteria for dissociative identity disorder (by *DSM-IV* criteria, dissociative disorder not otherwise specified [DDNOS]), and *International Classificatory Diagnostic manual (ICD-10)* multiple personality disorder and comorbid disorganized anxious insecure ambivalent attachment patterns. While their personalities can be described as mood disordered, borderline, psychotic, or neurotic, they are psychopathic-sociopathic in their behavior.

I was able to compare these two dangerous youngsters with other cumulatively, complexly or ritually group-abused/traumatized youngsters who had become perpetrators, witnesses, and victims of perverse atrocities. However, in contrast with the first two cases, these youngster came from warm, caring backgrounds where ordinary, good enough relationships and secure, loving attachment bonds existed. They and their parents could interact and respond appropriately. The youngsters who had experienced good enough mothering and fathering were securely attached even though their parents had been unable to protect them from abuse perpetrated from outside the family. One feels fellow feeling with them, not as if they came from another planet, as with the first two cases and their respective parents. They are treatable—a completely different prognosis.

The early life experiences suffered by Mark and Kimberley sharply contrast with development that occurs within secure attachments. In the afflicted youngsters and their parents, their traumatized, malattuned depressed mothers and grandmothers, and, respectively, their abusive, disorganizing spouses provided a setting for the development of severe dissociative phenomena and lack of fellow human empathy, comorbid with disorganized insecure and/or dismissive-rejecting attachment patterns.

The case vignettes support the thrust of important work on early brain development, and its dependence on good mothering, mirroring, and appropriate affective attunement[130, 131] facilitated by secure attachment[115–119] if right-brain development necessary to positive social interaction is to occur.[128] Such development is essential for ordinary life-appreciative social bonding and fellow feeling for others.

Following predictable life-event traumas such as bereavement, mourning occurs throughout life, affecting life course.[68,141] Many survivor parents are

intermittently overwhelmed by grief that takes on pathological or complicated mourning proportions.[73] Survivor parents who are preoccupied with unresolved grief have difficulty interacting with and setting limits to their children's activities; indeed coping with their robust activity.

Maternal depression and interfering images[45] can haunt bereft mothers who have lost previous infants or witnessed atrocities. Such images interfere with maternal responsiveness during early critical-sensitive periods of maternal-infant interaction and nursing, as clearly evident in the case of Betty.

Betty

Betty, born 10 months after the death of an infant brother, was a depressed 14-year-old with suicidal ideation. She presented with various manifestations of confused body image, personal and sexual identity, and was miserably, inextricably involved in relationships with unsuitable immature male friends. During the five years of her psychoanalysis, we speculated that her bereaved, depressed mother had related to her "replacement" infant daughter[35] with a confusing set of interfering memories of her dead son.

At Betty's request, when analysis ceased, her still very depressed mother was seen. Betty's mother opened her interview by describing how she had never been able to relate to handling her infant daughter. After her baby son's death, she had been and was still haunted by memories of him. Sometimes she had been surprised to notice that she was handling a girl baby.

Later Betty's youngest son presented with transsexual identity.

Inappropriate parental expectations of those who relate to their infants through idolization or idealization or with interfering images of significant others preclude ordinary development: it cannot take place under distorted mirroring, maladaptive expectations, and/or bombardments of projections from disturbed, traumatized parents.

Nora

Nora, a gaunt, divorced Israeli woman in her early 30s, underwent analysis in London more than 30 years ago. She felt she had but two alternatives: suicide, or serving as an escort to visiting Japanese men, despite her skills, talents, and training. She could relate to no one and felt misunderstood.

Nora was born a twin to peasant parents in middle Europe. Her father had escaped being killed by the Nazis, together with his first wife, children, and the rest of his family. He then found refuge with his second wife's family and became engaged to Nora's mother's sister. Then Nazis arrived again. His fiancée was killed. Nora's father and mother escaped in heavy snow, the sole survivors of the village. Beset with survival guilt, they clung together. Nora's mother became

pregnant with twins, so they married. Nora's twin died in infancy. Like Betty's mother, Nora's mother lost an infant whom she alternately confused with her dead sister. Transmission (projection) of her mother's negative affects and bizarre objects caused devastating damage to Nora. She bore the confused projections of her mother's survival guilt, and all her mother's ambivalent feelings about being alive instead of her sister. Constant adverse comparisons with the idealized infant twin sister emotionally battered her. Nora wrote a poem: "My mother never had a charm to give me: my mother only had her pain to give me, to live with me, to be my guardian, my company, my memory."

Nora was insecure, confused, untrusting, demanding, arrogant, off-putting, a panic-spreading person. She was lonely, friendless, a misfit, stumbling about in Great Britain, as her parents had in Europe, surprised to find themselves where they were, lives derailed and unfocused, without a safety net. Nora abhorred her parents' lack of education and poverty, felt little in common with them, pitied and hated them. She related to them dutifully, as they had to her. She suffered from, and, in turn, manifested their confusions, anxieties about eating and health, and their constant persecutory verbosity, often screaming in "a voice trenchant with weaponry." Like others who have lost the sense of their own reality, on the basis of "because I go on talking, I know that I exist," incessantly she talked at, rather than with, her interlocutors. In lieu of suicide, Nora had aborted nine fetuses in five pregnancies in Jerusalem. Why should she bring children into this world to suffer like her parents and herself? What her parents had experienced at the hands of the Nazis, they thereafter unwittingly caused her to experience. She evoked similar feelings in me in the treatment countertransference, and when I reported these difficulties at a survivor syndrome workshop, remote in time, place, and person, similar affects and defense mechanisms were irrationally displayed toward me by colleagues. So I came to identify one of the modes of transgenerational transmission of massive traumatization as affect-contagion phenomena.[2]

Death anxiety is frequently roused in traumatizing situations. In the following case, abreactive narration (which sometimes amounts to reexperiencing with a quality akin to reliving the original traumatizing situation) almost caused actual death; the horrific account roused great anxiety in both those present and those who heard of the incident later, including a secretary who was so distressed she could not transcribe the tape recording.

Job

An elderly gentleman in Tel Aviv, a twin experimented on by Josef Mengele, with great difficulty broke years of silence and told me and his wife a particularly sickening, bizarre, and gruesome image- and affect-contagion-generating

traumatic episode. He suffered a heart attack during the telling. Fortunately, he survived, felt better for having told what he had witnessed, and later organized a reunion of the remaining survivor twins. He remembered Mengele collecting skeletons of dwarfs for a medical school. Mengele threw the dwarfs live into glass vats of acid, and as a further experiment stood 10-year-old children to watch to witness the impact on them. Like many survivors, such as the very few *Sonderkommando* survivors, Job had spared himself and his family this recollection: *silence does not always mean shame, or guilt.* The silence of one of Hitler's personal bodyguards and its impact on his analyzed daughter stems from a very different set of experiences, but however a family secret is generated, whatever its content, silence and fantasies about that silence can have equally destructive effects on family relationships and the next generation. Silence caused by similar and different situations afflicts many survivors of African civil war atrocities, their families, and communities.

Cases from contemporary Africa illustrate direct trauma impact after generations of traumatization in impoverished and illness-stricken populations during civil war and political repression. In these debilitated populations, death, population movement, and detribalization wreak havoc: protective parenting is handicapped.

Cultural factors aggravate and/or alleviate stress. One cannot overlook the specific local context of living with trauma and its ramifications when trying to understand the complexity of its ongoing reverberations, inter- and transgenerational transmission. In Mozambique, after decades of civil war, countless survivors—child victim, witnesses, participants, and perpetrators—illustrate the importance of African cultural beliefs in omnipresent ancestral spirits and of local rituals and cultural memes when living with trauma. Shangaan-speaking tribes believe omnipresent ancestral spirits require daily appeasement rituals to avoid illness, strife, and other disasters.

Zinha

Zinha, age 12, survived three years in a military camp as a brutal commandant's sexual slave. Her fingers and ears were chopped off when, sent to prepare soup, inadvertently she picked leaves from an unmarked plot that belonged to someone else. When this happened, Zinha's mother abandoned her, believing that the incident had occurred because Zinha had been promised to the spirit of a long-deceased uncle who had been offended.

After the civil war had ended and purification ceremonies been performed that allowed the "contaminated" girl to return to her village, Zinha was ceremonially married off to the spirit of this dead uncle and sent to live alone in a hut in the bush.

Boi

The same belief system drastically further traumatized "Boi." At the age of 10 he was abducted by soldiers, abused, and saw his village burned and his kinfolk mutilated and slaughtered. He escaped, and again fled when he found a hut in the forest full of the fresh corpses of his classmates. He found a job with a vicious farmer, escaped after the war, and was ceremonially purified, and taken in by a local Christian bishop and his family, despite dire warnings that because they did not know whose ancestral spirit inhabited and controlled this boy stranger, Boi's presence was bound to cause grief to the villagers.

As was inevitable, when further misfortune struck, the bishop, too, accepted the customary traditional belief and verdict of the traditional diviner (*njango sora*) that his Christian belief-led adoption of Boi had offended local ancestral spirits and brought further afflictions on the already stricken villagers. In front of Boi and eight other former child soldiers who belonged to the small group with whom he was working, including his own sole surviving biological son, he committed suicide by deliberately stepping on a marked landmine. Boi fled to the further trauma of becoming a Maputo street child.

Because of the power of belief in ancestral spirits, already complexly traumatized children witnessed the horrifying death of their mentor. For similar reasons, at least 80 children in remote areas of South Africa's Northern Province annually witness their mothers burned as witches, designated as such by traditional diviners who name them responsible for their villages being struck by lightning.

Mozambican ex-Renamo and Frelimo boy soldiers who destroyed each other's homes, villages, and families are unlikely to become rehabilitated as ordinary citizens of a recovered society. They were recruited by forced participation in gruesome terrorization, often themselves vehicles of the destruction of their own parents, homes, villages, and friends. In their belief system, they also destroyed the chance for their victims' and ancestors' souls to find rest. Their cultures and country are ravaged, their previous values and self-esteem shattered. In their own eyes they are shamed, lack self-respect, are guilty in their very survival.

Traditional healers have always played a central part in tribal life and still occupy important positions. Cultural rituals can "decontaminate" and enable reintegration into village life by appeasing the particular ancestral spirits who inhabit each tribe member from birth. These spirits are identified by diviners who purport to know who the ancestral spirits were in whichever animal-masked man ritually raped a particular mother at the onset of her first menstruation. The animal whose mask the man wears is then supposed to protect the girl by

passing on its particular characteristic of cunning or strength. The ejaculated "salt" (semen) of the ritual rapist passes on the particular ancestral spirit to the girl. Children born to her will be of this ancestral spirit. Enormous social power is thus invested in the *njanga soras*. What happens after civil war, when so many traditional diviners have disappeared or lost track of which spirits are present concretely in whomever returns?

After the purification-reintegration ceremony the traumatized parties are forbidden to speak (or even think) of what happened—contrary to widespread therapeutic techniques for dealing with trauma. These traditional cultural methods have positive as well as negative implications for inter- and transgenerational trauma impact transmission.

The cautionary message for Western-trained trauma therapists is clear: they cannot function adequately without knowledge of specific local beliefs and mores and cooperation with traditional community healers.

A further terrible blow of fate, or restless ancestral spirits, compounded the tragic and terrible situation for war orphans in Mozambique. Floods struck. People were trapped in trees. Many parents pushed their children into helicopters and later drowned. Large camps of displaced, orphaned children formed. They know not from whence they came, nor whether or not their war-traumatized parents had survived. Who would dare adopt them? Societies do disintegrate.

Political complications exacerbate difficulties and adversely affect the entire situation in an extremely poor, infrastructureless, and natural disaster-prone country like Mozambique. Finally triumphant in intertribal strife, power-wielding politicians and industrialists, themselves former coerced child soldiers, were leaders of the lawless warring faction, uneducated except in pillage, murder, rape, and violent atrocity. It would be surprising were corruption and the usually brutal, callous methods that brought these 'leaders' to such positions not widespread in the aftermath of hostilities.

What can we learn from the South African situation, where politically generated trauma of the apartheid era[137] did not allow nonwhite mothers to keep their infants and children with them when they went to work as servants in white homes, resulting in a situation of widespread nonprovision of stable affectional bonding and nurture?

Affectional bonding is basic to prosocial behavior and caring identifications The seeds of the destruction of the South African apartheid system were sown in its futile attempt at implementation when laws conceived and maintained by the racist regime separated infants and small children from their working mothers and fathers. Apartheid ideology inevitably produced generations of detribalized urban psychopaths, the violent, compassionless sociopathic elements that run rampant in the new South Africa, handicapping and threatening its

future peaceful development. The merit of the revolution, led by children who rationally refused to learn in Afrikaans, was spoiled by the behavior of transgenerationally and directly violated, deeply traumatized elements among them.[142]

Rendered vulnerable to traumatization by early deprivation of sensitive mothering, youth in South African townships[142] were multiply traumatized. Most children witnessed violent deaths, including "necklacing," in which a victim with a gasoline-filled tire around his or her neck was ignited without trial. The deprived, largely uneducated youth were oppressed, detribalized, and brutalized. Their futures were uncertain, as was their ability to rear the next generation in a direction against violence. They were set on continuation of a traumatization-prone pattern that continues in the violent crime-plagued newly democratic South Africa.

AFFECT-CONTAGION PHENOMENA

Reporting in a large group situation of the impact of Nora on me, I discovered a mode of onward trauma transmission, affect-[2] (and image-) contagion phenomena.[45] How are the effects of affect-contagion phenomena generated? How do they spread? How may their effects be contained and ameliorated in the inner world of the psyche, and in the social world? What are the sociopolitical implications?

A simple linear application of the concept of the umbrella term *affect-contagion phenomena* is not intended by comparing their impact to shock waves or contagion. We think of spread in terms of homeostasis, linearity and predictable causality, and also nonlinear dynamics, dynamic systems theory, chaos and complexity theory, networking, process, and interconnectedness.

Affect-contagion phenomena behave like chaotic strange attractors, the foundation for hidden order in natural systems.[143] Ongoing traumatizing effects exist, like Mandelbrot fractal factors in the general chaotic systems that comprise society, have scaling (recurring, magnifying) and summative effects, spread in uncertain ways, dissipate, and stimulate self-organization in different levels of systems the trauma has effected. An irreducible degree of randomness, uncertainty, and unpredictability is a fundamental feature of nature. Trauma effects are modified by innumerable factors, including resilience or hardiness possessed by any individual, family, or group, and the buffering, ameliorative, and container effects of various social and cultural structures and practices.

The ongoing impact initiated by a traumatic event is liable to bifurcate and keep branching, leading to scaling fractal effects in the patterns of turbulence, particularly at crisis points where fluctuations occur at boundaries and interfaces. The processes caused by the initial trauma lead to periods of spontaneous reorganization or punctuated equilibria in the lives of affected individuals, families, groups, and societies.

Affect-contagion phenomena are both self-organizing and dissipative in their effects. They are autopoietic, in that the people they affect couple with their diverse environments and with others in a manner that makes them continually self-generating. Affect-contagion phenomena affect others and this changes their effects, both on the initial victim and per se.

Trauma initially causes disequilibrium, which leads to spontaneous new structure-function organization in afflicted individuals. Trauma causes losses of trust, empathy, sense of being grounded and connection to personal history, body, identity, meaning, faith, boundaries, power, autonomy, capacity for vitality and personal agency, safety, and initiative. Trauma makes people susceptible to death imagery and illness.

But there are positive, helpful structures and influences in society that counteract affect-contagion phenomena. Their influence is disseminated in similar ways. Both personal and shared social containers and buffers that enable safe expression and a measure of working through of trauma are considered in more detail below.

In what is known as *transitional space*, where individual and group subjectivity finds and makes use of what objectively exists,[139] there are everywhere cultural resources for expression and safe containment of trauma in imaginative ways: failure of containment is traumatizing. Ways of containment have to be found and promoted in therapy to mitigate, moderate, and buffer uncontained or unassimilated affect-contagion phenomena from inadequate digestion of the overwhelming feelings (memories, images) of trauma. "The management of the individual's emotional economy becomes his primary concern, in terms of which all else is rationalized" (p. 135).[8]

To different individual extents, people make use of cultural expression in transitional cultural arenas as externalized equivalents of the inner dream space, including interactions that take place in therapies, play, cultural containers,[5–8] art, music, dance, theater, social life, religious rituals, and sports. Examples might include activities like the social use of cockfights in Indonesia,[9] or ritualized communal containers like the fast of the ninth day of the month of *Av* (*Tisha B'Av*), when Jews still mourn the destruction of the Second Temple in Jerusalem that occurred at the hands of the Romans in 70 c.e. Similarly, the rich traditions of African dance, song, fireside dramatic storytelling (*indaba*), purification rituals, strong sense of community with its in-built supportive structures, all play positive roles in reducing the impact of accretions of individual and communal pain consequent on the manifold impacts of trauma and injustice that Africa's populations have suffered, and continue to endure.

The significance of symbolization cannot be underestimated.[143] Symbolism per se has a container function in language, and in both the inner container

(or play or symbolism) of the dream space and in outer social and cultural containers, such as games and rituals.

The inner sleeping-dream space, dream experience, and dream symbolism comprise a personal individual container for working through traumatic events rather than promoting onward transmission. The various kinds of group therapies and expressive therapies devised by Western society exemplify particular forms of cultural containers, as do the ritual purification ceremonies run by Shangaan tribal diviners.

I chose the first and last letters of the Hebrew alphabet, ?-*aleph* and ?-*tav*, to describe the function of external intersubjective and social phenomena. I term the way these cultural containers function positively to hold society in a more-or-less stable equilibrium as ?-*aleph*-functioning to differentiate them from disruptive ?-*tav*-functioning affect-contagion phenomena. This terminology was suggested by Wilfred Bion's designation of the functioning of good enough intrapsychic introjected "containers" with the Greek letter *alpha* and Gianna William's use of *omega*-functioning to describe that of disruptive, "foreign body" introjects.[62]

It would be surprising if the ways in which disruptive ?-*tav*-functioning aftereffects of traumatization, affect- and image-contagion phenomena spread are not similar to those of positive, healing, ?-*aleph*-functioning, buffering, stabilizing effects of good enough parenting and effective therapies. The input of buffering, moderating, and ameliorating factors effects change in similar ways to those by which affect-contagion phenomena spread, and include therapeutic situations. These contribute to a salutogenic attitude to life and resilience, not entirely innate givens. Salutogenic survivors are not broken but overcome adversity, stress, and trauma, to bounce back and even transcend their life-shattering experiences.[113,114]

Affect-contagion phenomena are unavoidable. Their role in transgenerational impact of massive traumatization cannot be underestimated. Spreading traumatization occurs because personal and social containers deal inadequately with overwhelming ego defense-breaching affects. Reenactments inevitably take place within transference-countertransference situations, in the family and elsewhere.

Assuredly there are social implications of inter- and transgenerational transmission of trauma aftershock. Do universal patterns and laws such as those of the Mandelbrot relate across all manner of states of organization of humans? They do seem to when one considers the after impact of trauma and its spread.

Using catastrophe theory, when there are too many deeply traumatized people, is there a critical catalytic turning point at which an individual will break, or a

family collapse, or society degenerate at an alarming rate, almost irrecoverably? Is this what we have seen, for example, in Nazi Germany, Stalin's Soviet Union, Pol Pot's Cambodia, the Chinese Cultural Revolution, in Lebanon, in Mozambique, among the Ik mountain people,[108] in Rwanda, in ex-Yugoslavia, in the Palestinian territories, and elsewhere in generations of displaced refugees? Are we seeing the aftereffects and trans- and intergenerational transmission and propagation of terrorization and traumatization in places where people had lived together in apparent harmonious coexistence, tolerating their diversity at times for several generations? Or is there rather a constant balance and shift between stabilizing and destabilizing factors, a kind of periodicity? Can the so-called butterfly effect of weather forecasting apply also to humans and their interactions? In other words, does some seemingly insignificant and unrecorded/unrecordable event in the life of an individual result in large societal changes? Theoretically, yes.

Trauma management is crucial in sociopolitical and personal life if we are to build healthy individuals and societies over and beyond basic needs and infrastructure. Democratic societies cannot survive when the numerical mass of those who are damaged and dependent exceeds the "containing" or "carrying" capacity of those who are relatively mature, healthy individuals.[12] Trauma etches indelible changes in the brain.[128,144,145]

Is tolerant coexistence achievable in the face of humankind's ubiquitous destructiveness, and continuous or intermittent but recurrent and cumulative damage? Prevention, amelioration, and minimalization of the effects of traumatization are possible. In order safely to contain the natural grief, rage, pain, and desire for revenge so that eventually tolerant, nonviolent coexistence may become possible, society needs not to forget, but rather to promote conditions to facilitate overall healthy development, treatment, and support communal ritual containers.

Politicians, industrialists, educators need to understand, value, and support parenting, cultural containers, and professionals trained to cope with inevitable affect-contagion phenomena in the short- and long-term aftermath of trauma to mitigate their inter- and transgenerational spread.

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Conclusion: How Might We Prevent Abnormal Behavior from Occurring and Developing?

Thomas G. Plante

This book series has tried to bring the contemporary world of abnormal psychology and behavior to you in an informative, updated, and understandable manner. Hopefully, you have learned much about how abnormal behavior impacts all those around us including those we care most about. The book has tried to articulate what is currently known about a wide variety of abnormal psychology topics so that you will be much better informed about these issues that are often discussed in the news and elsewhere.

After reading and reflecting on these important topics, one might wonder what can be done to minimize, eliminate, or prevent these kinds of problems from occurring. There is clearly no simple answer to this question. There are a variety of reasons why abnormal behavior emerges and develops. Some are due to biological or physiological factors such as genetics, hormonal and biochemical influences, and the exposure to both legal and illegal substances. Others are due to internal psychological conflicts associated with personality, mood, and stress mechanisms. Still others are due to the interactions of many social and interpersonal relationships with loved ones, work or school associates, neighbors, and community members. There are many different roads that lead to abnormal and problematic behavior. However, this does not mean that we can't do much more to improve the odds that abnormal behavior won't develop within ourselves and others. We clearly can make a better world for ourselves and for society if we can follow some key principles of prevention.

After reading this book series and carefully evaluating the advice of many leading experts, several important principles of prevention emerge as being especially important in preventing abnormal behavior from either developing or getting worse. While we cannot do justice to each prevention strategy articulated, we can at least introduce these seven principles to the reader. This list is not meant to be exhaustive or exclusive. It merely provides some very brief reflections and observations as well as prevention and coping principles.

AVOID ABUSE AND NEGLECT OF CHILDREN

As clearly articulated in several chapters of the series, the abuse and neglect of children occurs at alarming and disturbing rates. Abused and neglected children are much more likely to develop certain troubles with depression, anxiety, violence, substance abuse, interpersonal difficulties, and a host of other problem behaviors. Once developed, these problems impact others around them and can be passed on from generation to generation. Somehow, efforts must be increased to minimize child abuse and neglect. Public policy experts, child protection professionals, family attorneys, politicians, mental health professionals, and others must work closely to help children stay safe and to ensure that those entrusted with the welfare of children (e.g., parents, teachers, coaches, child care providers) are capable of providing the competent and effective care that children need, which is free from any abuse or neglect. While we can't totally eliminate child abuse and neglect, we can certainly try to minimize it by pooling our collective resources and expertise making a firm commitment to the safety and well-being of all children. Like a lot of things, it will take a selfless commitment of time, money, and other resources to make significant progress in this area. It will involve working with many different community, civic, religious, educational, law enforcement, mental health, political, and other agencies. Perhaps as former President Nixon argued for a "War on Cancer" or former President Johnson's "War on Poverty," we may need a "War on Child Abuse and Neglect."

MINIMIZE POVERTY

Those who are poor are less likely to have access to professional mental and physical health care services and are much more likely to be impacted by the stress that is associated with poverty (e.g., unemployment, poor housing, and exposure to community violence). As poverty levels increase and the gap between the rich and poor widens, it is likely that the psychological and behavioral problems associated with poverty will increase. Therefore, efforts to reduce poverty will likely minimize the development of or the worsening of a

variety of abnormal psychology problems. Again, politicians, business leaders, mental health professionals, family advocates, and others must somehow work together in order to minimize poverty both here and abroad. Perhaps former President Johnson's "War on Poverty" needs to be waged once again.

MINIMIZE EXPOSURE TO VIOLENCE

Sadly, we live in an often highly violent world. Violence is not only perpetrated during wars and in street crime but also in the seclusion and privacy of one's own home. Domestic violence, child abuse, date rape, and other kinds of violence are all too common. Furthermore, research has clearly indicated that exposure to violence through entertainment sources (e.g., movies, video games) also increases the risk of both violence and other mental health–related problems among vulnerable viewers. The entertainment industry, politicians, mental health professionals, family advocates, and others must somehow work together in order to minimize violence exposure in entertainment, in the media in general, and in both public communities and private homes.

DEVELOP AND NURTURE EFFECTIVE AND AFFORDABLE TREATMENTS (INCLUDING PHARMACEUTICALS)

The development of quality and effective intervention strategies including pharmaceutical agents has the potential ability to greatly reduce the impact of abnormal behavior, assuming these options are available to all those in need. For example, medications such as Prozac and other selective serotonin reuptake inhibitors have revolutionized the treatment of depressive disorders during the past decade and a half. These medications, while not perfect or right for everyone with depression, have greatly improved the odds of effectively dealing with a number of psychiatric troubles including obsessive-compulsive disorder, depression, bulimia, and so forth. Recent quality research using empirically supported psychological interventions has also demonstrated remarkable results for a wide variety of abnormal behavior problems. Quality behavioral and psychological interventions for panic disorder, depression, eating disorders, post-traumatic stress disorder, and many other problems are available. Research and development on affordable medications and psychosocial interventions to help those who suffer from abnormal behavior offer hope to not only those afflicted with these conditions but also to those loved ones who suffer too.

However, medications in particular can often too easily be seen as a magic pill to solve all problems. Medications can also be extremely expensive in the United States in particular. A careful and thoughtful effort to make appropriate

medications available to those who can truly benefit from them will likely help to minimize the severity of abnormal behavior for not only identified patients but also for all those who are connected to them via family, work, school, or other relationships. The best available research and practice is needed to ensure that interventions that can help people with abnormal behavior are readily available and used.

ALTER CULTURAL EXPECTATIONS ABOUT BEHAVIOR

In previous decades, children rode in cars without seat belts and rode their bikes without bike helmets. Parents physically hit their children at will and in public. People were allowed to smoke wherever they wanted to do so. Women who sought to work outside of the home were considered odd or too bold. Cultural expectations about how we live our lives that have impacted social customs and expectations can be applied to abnormal behavior risk factors as well. For example, violence exposure, maintaining zero tolerance for child abuse, alcohol and other substance abuse, poverty, and so forth may help to create a society where abnormal behavior cannot flourish. Public policy can be used to help decrease the odds that abnormal behavior risks are tolerated. Cultural expectations and policy decisions can be used to ensure that those who experience particular problems seek appropriate resources. There is too often a social taboo to request help from mental health professionals about abnormal psychology related problems. This resistance and avoidance tragically often allows potential problems to become more severe and serious.

AVOID EXPOSURE TO ABNORMAL PSYCHOLOGY RISK FACTORS

While Americans demand individual freedoms, exposure to particular risks increases the chance of abnormal behavior of developing. For example, legalized gambling in some form (e.g., Indian gaming, lotteries, Internet gambling) is now allowed in just about all states and is certainly not confined to Las Vegas and Atlantic City. Bars and liquor stores are open and available around the clock in just about every city. Pornography and online gambling are available on the Internet and thus just about everyone who has a computer or can get to one can be exposed to these influences. These trends increase the odds that those who are vulnerable to developing certain abnormal problems (e.g., alcoholism, pornography, gambling) will do so. As I have heard many times, "An alcoholic probably shouldn't work as a bartender." Controlling the environment so that temptations are not available very easily would go a long way in minimizing the development of many abnormal behavior problems. Furthermore, vulnerable

children and those with predilections to particular behavioral problems can all too easily access materials that can contribute to further abnormal psychology problems. Therefore, being thoughtful about the environmental influences that increase the odds of developing problems later in life should make all of us more sensitive to these influences.

MAXIMIZE ETHICS—ESPECIALLY SOCIAL RESPONSIBILITY AND CONCERN FOR OTHERS

At the end of the day, somehow we all must find a way to live together, sharing the planet and its resources. If we have any hope of living in a world that is humane and just and where abnormal behavior and problems are managed better and minimized, we'll need to maximize our social responsibility and concern for others. The ethical treatment of all persons and our efforts to make the world a better place for all will hopefully prevent or at least minimize many of the troubles associated with abnormal behavior. A global effort to support ethical interactions among all may help us better live with social responsibility and concern for others.

While abnormal behavior is likely to be with us forever, there is much that we can do as a society to minimize the possibility that abnormal behavior will develop in at-risk individuals and groups as well as to help those who experience these troubles. Mental health professionals working with others including public policy leaders, industries such as the pharmaceutical companies, and experts in many other fields can help a great deal. Can our culture and society make the commitment to do this? Let us hope so.

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About the Editor and the Contributors

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Mental Disorders of the New Millennium

MENTAL DISORDERS OF THE NEW MILLENNIUM

Volume 3
Biology and Function

Edited by Thomas G. Plante

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Abnormal Psychology

*Dedicated to my sisters—Mary (Plante)
Beauchemin and Leeann (Plante) Sperduti—who have taught me much
about the human condition and have both worked tirelessly to improve it.*

Contents

Preface

Tragically, the daily news is filled with stories about significant and remarkable problems in human behavior. Each morning we are greeted with news reports about murder, suicide, terrorist acts, drunken driving accidents, child molestation and abduction, drug abuse, gambling troubles, gang violence, various criminal behavior, and so forth. Other frequent stories reported in the press involve the betrayal of trust among highly respected and regarded members of society. These stories include the legal, sexual, financial, and general ethical lapses of politicians, leading sports celebrities, and movies stars. Some reports include the sexual abuse perpetrated on children and teens by school teachers, coaches, and members of the clergy. Other stories focus on the stress-related troubles soldiers experience following their duty in war. Still others focus on more and more reports of what appear to be mental problems such as autism, dementia, attention deficit disorders, panic, eating disorders, and depression, among both children and adults.

These troubles are reflected in recent cover stories in magazine news weeklies such as *Time, Newsweek,* and *US News and World Report.* Problems such as attention deficit hyperactivity disorder, autism, Alzheimer's disease, depression, panic disorder, murder-suicide, eating disorders, and child sexual abuse, among others, have been featured many times over as cover stories in these and other popular media outlets. The fact that these topics appear frequently on the covers of these news weeklies means they must impact significant numbers of people.

Perhaps just about everyone in the United States is affected by mental illness and abnormal behavior to some extent. Many people either suffer from

one or more of the various mental disorders or live with those who do. It is likely that almost everyone in our contemporary society knows someone in his or her immediate family or circle of close friends and relatives who suffers from a significant abnormal behavior, psychiatric condition, or behavioral pattern that causes the person and his or her loved ones a great deal of stress.

Consider just a few of these statistics from our chapter contributors:

1. About 1 million people will die by suicide every year. The worldwide mortality rate of suicide is 16 per l00,000, or one suicide every 40 seconds. Fifty-five percent of suicides occur before age 44. Suicide is the third leading cause of death for both sexes.

2. About 1 million older Americans (1 in 35) is a victim of elder abuse each year, and between 3 and 5 percent of older adults over the age of 65 are or will be victims of abuse and/or neglect.

3. Epidemiological studies suggest the prevalence rate of child and adolescent depressive disorders ranges from 2 to 9 percent.

4. Over 18 million Americans suffer from some type of depression each year, and about 20 percent of the U.S. population will experience a significant depressive episode in their lifetime.

5. The number of probable adult pathological gamblers varies from just under 1 percent in the United Kingdom to between 1 and 2 percent in the United States and about 2.5 percent in Australia.

6. About 20 percent of all American women and 15 percent of all American men report being sexually abused by an adult while they were still a child.

7. About 4 percent of Catholic priests and 5 percent of school teachers have had a sexual encounter with a minor child in their care.

Clearly, mental illness and abnormal behavior touch the lives of just about all of us!

What's going on? How can it be that so many highly problematic psychiatric disorders, abnormal behaviors, and problems in living impact so many people? It wouldn't be an exaggeration to state that the vast troubles of the world stem from abnormal behavior. From ignoring global warming to terrorism, from murder to suicide, from divorce to gambling, from autism to dementia, it seems that abnormal behavior is at the root of so many challenges of our day.

Sadly, most of the books available in the field of abnormal psychology are not especially useful for the average educated lay reader. Much of the literature currently available tends to fall into two categories. The first includes academic books written by academics for an academic or scholarly audience. These books are often written in a very dry, jargon-filled, data-driven manner that is challenging for the general reader to get through. In fact, these books are often challenging for professionals in psychology and related fields to understand as

well. The second category includes trade books that tend to be very simplistic and often tell the story of someone suffering from a particular problem. These books are often located in the self-help or inspirational section in a bookstore. Books of this type are written by those who experience the particular disorder, mental health professionals who treat the problem, or journalists who tell a remarkable story about a particular case that made news. Very few books are written for the educated lay reader that balance academic, scholarly, and clinical information with a readable, engaging, and user-friendly style.

The purpose of this series on mental disorders is to help bridge this gap between academic and self-help /inspirational books written on abnormal psychology topics that impact society—those topics that potential readers see on the covers of weekly news magazines or in daily newspapers. The series focuses on contemporary abnormal behavior topics and is compiled from contributions by experts for an educated lay audience. Leading experts who study, treat, evaluate, and reflect upon these troubles and issues have been asked to write chapters for you to help you better understand these contemporary problems. The chapters are based on the most up-to-date research and practice evidence and go well beyond the information provided in popular media outlets. Hopefully, you will find that the books are highly informative, contemporary, and readable.

If we better understand the factors that contribute to these contemporary abnormal behaviors and patterns, then perhaps we can find better ways to prevent some of these problems from emerging and better evaluate and treat those who suffer from these experiences. In an effort to create a better world for ourselves and our children we must do all that we can to prevent abnormal behavior and help those who are troubled by abnormal behavior in themselves, their loved ones, and their communities. In doing so, we will be better able to create an improved world.

Acknowledgments

Many people other than the author or editor assist in the completion of a book project. Some contribute in a direct way while others help in a more supportive manner. I would like to acknowledge the assistance of the people who worked to make this book idea a reality and who have helped me in both direct and indirect ways.

First and foremost, I would like to thank the contributors to this volume. Leading experts who represent the very best that the professional community has to offer graciously agreed to contribute quality chapters to this book project. Second, I would like to thank my associate editors, Drs. DeLeon, Kaslow, and Plante, for agreeing to serve as associate editors for this book and all the books in the abnormal psychology book series. Third, it is important to recognize the wonderful people at Greenwood who published this book. Most especially, many thanks go to Debbie Carvalko, our editor at Greenwood. Fourth, I would like to thank Santa Clara University, which has supported me and allowed me many opportunities to pursue my scholarly academic activities and interests.

Fifth, I would like to acknowledge the anonymous persons who are referred to in this book, who have allowed their life experiences and traumas to become instruments of learning for others. Sixth, I would like to thank my family patriarchs (Bernard Plante, the late Henry McCormick, and Eli Goldfarb) and matriarchs (Marcia Plante, the late Anna McCormick, the late Margaret Condon, and Marilyn Goldfarb) and my sisters (Mary Beauchemin and Leeann Sperduti), all of whom have taught me much about the human condition. Finally, I would like to thank my wife, Lori, and son, Zachary, for their love and support while I worked on yet another compelling book project.

Postpartum Depression: More than the "Baby Blues"?

Rudy Nydegger

Depression is a major health problem in the United States and around the world. At any time, depression affects 15 to 25 percent of the population,[1,2] and it is estimated that the economic burden of depression in the U.S. is about four billion dollars per year.[3] One of the major problems with depression is that it is frequently undetected, and less than 25 percent of patients suffering from psychological conditions (including depression) are under the care of a mental health professional.[1,3] Of particular interest to us in this chapter is the fact that women are twice as likely as men to suffer depression, and this is most pronounced during the child bearing years of 25 to 45. There is also a particularly high incidence of depression in women during premenstrual, perimenopausal, and immediately postpartum periods.[3]

Of the four million births in this country, as many as 40 percent are complicated by some sort of postpartum mood disorder.[4] However, many patients and providers overlook these symptoms and dismiss them as normal. This fact has led many providers to feel that all mothers should be screened routinely for mood disorders, but this is not typically done. While many of these postpartum mood disorders will remit, it is true that many mothers report being depressed one year after the birth of their child.[5] Other studies have found that 10 to 28 percent of women experience a major depressive episode postpartum, and most of the studies are closer to the 10 percent figure. However, this still suggests that a substantial number of women who give birth will experience not just a mood disorder, but a *major* mood disorder following birth.[6] It is also true that women

who experience a postpartum mood disorder are at high risk for a relapse or continuing psychological illness. In fact, during one follow-up study, about 80 percent of patients who were diagnosed with a postpartum mood disorder later sought help for psychological complaints.[7,8]

Some of the major reasons why there is concern for mothers suffering from postpartum affective disorders are the effects that these disorders have on mothers, infants, and others in the family. When untreated or under-treated, these problems can have significant and far-reaching effects. One study found that 32 percent of women who suffered an episode of postpartum depression dramatically changed their future childbearing plans, many resorting to adoption, abortion, or in some instances, even sterilization.[9] In many cases, depressed mothers show a more negative attitude toward their children, and a mother who is experiencing these types of difficulties may put significant emotional and even perhaps financial burdens on their families.[10] It has been demonstrated that in a 4-year follow-up study, depressive episodes in mothers were linked to poorer cognitive test scores in their children.[11] While it is not clear how pervasive or continuing these effects are, it is clear that in some children, even as late as four years after birth, there are cognitive changes that are apparently linked to previous depression in their mothers.

Other studies have found that postpartum depression can affect the bonding between mother and infant, and that this can affect infant well-being and development later. Mothers with postpartum depression are more likely to have negative attitudes toward their infant and will often see the child as more difficult and demanding. Often, mothers with postpartum depression have difficulty engaging the infant, are more withdrawn or intrusive, and have more negative facial expressions when with the infant. Children of mothers with postpartum depression are more likely than those born to non-depressed mothers to have behavioral problems such as difficulties with sleeping, eating, tantrums, cognitive development, emotional and social dysregulation, and early onset depressive illness.[5]

Postpartum depression is hardly a new discovery. We have been aware of this problem for a very long time. Even Hippocrates, in 460 B.C. described "puerperal fever," theorizing that, "suppressed lochial discharge was transported to the brain where it produced agitation, delirium, and attacks of mania."[12] Eleventh century writings of gynecologist Trotula of Salerno speculated, "if the womb is too moist, the brain is filled with water, and the moisture running over to the eyes, compels them to shed tears." Attempts to describe postpartum depression became more systematic in the mid-19th century when Esquirol wrote about the "mental alienation of those recently confined and of nursing women." Various accounts of puerperal psychosis and depression are specifically delineated

by Marce in his 18th-century *Treatise on Insanity in Pregnant and Lactating Women*.[13]

While postpartum affective disorders have been described throughout history, it is interesting that they have received less attention in the professional literature than less common problems such as gestational diabetes, preeclampsia, and preterm delivery. Although we are certainly seeing more attention paid to psychological problems today, they are still frequently overlooked. In addition, there is still serious and frequent debate over the causes, definitions, diagnostic criteria, and even the existence of postpartum mood disorders.[10]

While it is true that these disorders are often overlooked at the primary care level, this is not terribly surprising since providers are often principally concerned with the welfare and health of the infant, and the mother may be too embarrassed to report being depressed when she feels that she should be happy. However, the risks of missing this diagnosis are significant. For the mother, there are the risks of a continuing and perhaps chronic depressive illness, and even the risk of suicide. For the infant, as mentioned above, there are risks of impacting maternal bonding and later child development. There is also the risk in the infant for the development of psychological problems later in the child's life.[14]

In sum, it is clear that childbirth is one of the major life stressors for women, is a risk factor for mental illness, and it has been frequently demonstrated that there is a temporal relationship between childbirth and psychiatric admissions.[12,15,16] Of course, the preponderance of psychological disorders in the postpartum period do not require hospitalization, but the increase in serious problems is quite striking. Data from 35,000 deliveries at 90-day intervals over a two-year period before and after delivery showed a seven-fold increase in the rate of psychiatric admission in the first three months after childbirth.[15] Further, the risk of psychosis was 22 times greater during the postpartum period than it was pre-pregnancy. For women admitted for psychiatric reasons postpartum, 87 percent of them were for affective disorders with the majority being for major depression.[15,16]

SYMPTOMS AND FORMS OF POSTPARTUM MOOD DISORDERS

There are several types of postpartum mood disorders, and it is important to distinguish between them, especially since the appropriate treatment depends upon accurate diagnosis. Recognizing the disorder and prescribing the appropriate type of treatment in a timely manner is very important in the treatment of any type of disorder, but certainly for postpartum mood disorders. The different

types of postpartum mood disorders vary from very mild to extremely serious and dangerous.

The "baby blues" has mood swings, irritability, feelings of loneliness and anxiety, and typically lasts from a few hours to a couple of weeks. Postpartum depression may begin a few days or a few months after birth and may occur after the first or any or all subsequent births. This disorder has similar symptoms to the baby blues, but is more intense and lasts longer—up to one year or more. Unlike the baby blues, postpartum depression also significantly interferes with the mother's life. Finally, postpartum psychosis or puerperal psychosis is the most severe type of postpartum disorder. It usually has an acute onset, often within a short time after birth. The patient often hallucinates, is delusional and/or agitated, has insomnia, and shows a loss of touch with reality. This disorder usually requires hospitalization and medical intervention because the patient may be self-destructive and may also harm her children.[17]

Interestingly, some have even described a type of postpartum disorder that may be found in fathers. Some new fathers and especially stepfathers may experience some depression after the birth of a child. They are particularly vulnerable if:

- Their partner is depressed
- They are ending their relationship with the child's mother
- They are unemployed
- They are poorly educated
- They are socially isolated
- They are under severe stress
- They are in a physically aggressive relationship with the child's mother[18]

Diagnosing a postpartum mood disorder is not always easy, especially in the milder variants. Weight and appetite changes as well as sleep problems are so common in new mothers that many physicians don't suspect depression. Questions need to be carefully asked to insure that it is not being overlooked.[10] Some have even begun using a 10-question scale (the Edinburgh Postnatal Depression Scale) that is used as a screening device to try and catch some of these cases that might otherwise not be diagnosed.[19,20]

Having briefly described the various postpartum mood disorders, let us now examine them in more depth. As mentioned above, the least problematic form of postpartum mood disorder is commonly called the baby blues. Typically, this is not even considered to be a disorder, and it affects anywhere between 40 to 85 percent of all mothers, depending upon which study one examines. The onset is usually in the first week postpartum and the symptoms usually peak in three to five days. This disorder usually only lasts a few weeks at most, and may spontaneously resolve in a matter of days. The symptoms of baby blues involve

things like: unstable mood, weepiness, sadness, anxiety, lack of concentration, feelings of dependency, and irritability. These symptoms may be uncomfortable, but don't interfere with the mother's ability to function.[5,21,22,23,24] The etiology of baby blues is assumed to be multifactoral, and involves some or all of the following factors: rapid hormonal changes after birth, physical and emotional stress from birthing, physical discomfort, the emotional letdown after birth, awareness of and anxiety regarding increased responsibility, fatigue and sleep deprivation, and disappointments that may come from a variety of sources.[21] Since this condition usually spontaneously remits, there is not usually any formal treatment prescribed. However, rather than ignoring this, supportive care and reassurance seem to help and should be made available when the mother is experiencing this type of difficulty.[22]

Postpartum depression is a more severe type of problem than baby blues, and is considered to be a clinical disorder deserving of treatment. It is also true that this disorder itself exists on a continuum from mild to severe, and the severity of the symptoms usually determine the types and length of treatment that is used.[4] It should also be noted that in diagnosing this problem it is very important to first rule out physical causes like anemia and thyroid problems.[5] Postpartum depression can develop at any time during the first year postpartum, and usually peaks within the first four months after birth.[24]

This disorder is a unique and serious complication of childbirth, and its insidious course complicates 10 to 15 percent of all deliveries.[4,5,7,11] The majority of patients suffer postpartum depression for more than six months, and if untreated, 25 percent of the patients are still depressed one year later.[25] In adolescent deliveries, the incidence rate is usually between 26 to 32 percent of all births, and is clearly a major health risk for adolescent mothers.[26] Postpartum depression develops insidiously over the first three months after delivery although it can be acute as well, and it may be very persistent and debilitating for many mothers. Symptoms are very much like major depressive disorder (MDD) and often include suicidal thinking and thoughts of death. Occasionally, anxiety is prominent and many mothers worry obsessively about harming their baby. In addition, the disorder often causes the mothers to have negative feelings about the infant, and will interfere with the mother's ability to care for herself and her baby.[5]

The usual symptoms of postpartum depression include:

- Dysphoric mood
- Anhedonia (absences of pleasure in activities that are usually enjoyable)
- Difficulty concentrating and/or making decisions
- Psychomotor agitation or retardation
- Fatigue

- Changes in appetite and/or sleep
- Recurrent thoughts of death or suicide
- Feelings of worthlessness and guilt—especially failure at motherhood
- Excessive anxiety over the child's health[10,13,21]

When anxiety and delusions are present, the postpartum depression may be termed *atypical*.[24]

This is a serious problem and usually requires some type of treatment when it is diagnosed. Very importantly, the risk of relapse in subsequent deliveries is 1:3–1:4.[22] This is not like the baby blues, since the symptoms must last for more than two weeks and must have dysphoria and/or anhedonia most of the day, almost every day for at least two weeks.[13] As mentioned above, postpartum depression is much like MDD, but there are some differences. For example, postpartum depression also includes:

- Difficulty sleeping when the baby is sleeping
- Lack of enjoyment in the maternal role
- Feelings of guilt relative to parenting ability
- And the mother may also have
    - Anxiety, including panic attacks
    - Obsessive fears of harming the baby[4]

Some of the signs that the mother or those around her may notice include:

- Feeling restless and irritable
- Feeling sad, depressed, or crying a lot
- Having no energy
- Physical symptoms (e.g., headache, chest pains, palpitations, numbness, hyperventilation)
- Insomnia and fatigue
- Decreased appetite and weight loss
- Overeating and weight gain
- Trouble focusing, remembering, or making decisions
- Being overly worried regarding the baby
- Not having any interest in the baby
- Feeling worthless and guilty
- Being afraid of hurting herself or the baby
- Unable to enjoy things that she usually enjoys—including sex[17]

Of course many of these symptoms can exist in a number of different conditions, and in fact are perfectly normal at times. If they are troublesome enough to interfere with normal functioning and happiness, and/or if they don't go away or even get worse, then it is time to mention them to the physician or someone else who can help.

Of all of the postpartum mood disorders, postpartum or puerperal psychosis is by far the most serious. Fortunately, it is very rare and only occurs in .1 to .2 percent of all deliveries.[5,27,28] However, this rate is 12 to 14.5 times the prenatal incidence of psychosis.[27] Typically, this has a very rapid onset, and is usually manifest in the first three weeks postpartum, and within three months at the most.[29] There is also a second and smaller peak of incidence that occurs 18 to 24 days postpartum.[4]

Patients with this condition may present with symptoms that resemble acute mania or psychotic depression, and may have hallucinations or delusions that are very frightening. This may present as a rapidly evolving manic episode with markedly bizarre behavior.[5] Many patients have additional symptoms that resemble delirium and involve distractibility, labile mood, and transient confusion.[13] Since these patients frequently suffer from both delusions and suicidal tendencies, the impact of this disorder on both mother and child are quite significant.[10] At times the delusions may take the form of the infant dying or divine or demonic intervention. Further, the hallucinations may take the form of commands that instruct the mother to harm herself or the baby. Mothers with this disorder are at higher risk for suicide and infanticide.[4,5]

People who develop this disorder usually have some history of a serious psychiatric disorder. Most commonly it is found that women who have bipolar disorder or who have previous episodes of postpartum psychosis are most at risk for developing this very serious condition.[5] It is also reported that patients with a previous diagnosis of schizophrenia are also at higher risk for this disorder.[4]

For patients diagnosed with postpartum psychosis, hospitalization is often necessary because of the risk to the mother and the child. Acute treatment also usually involves psychotropic medication, with mood stabilizers being the medication most frequently chosen. Often these are prescribed in combination with antipsychotic medications. For patients who do not respond well to medication, electroconvulsive therapy (ECT) has also been used, and has been found to be safe and effective.[5]

RISK FACTORS AND ETIOLOGY

Postpartum depression is a cross-cultural phenomenon and has not been associated with any particular ethnicity, socioeconomic class, or educational level.[4,17] In fact, any woman who is pregnant, has had a baby in the past few months, miscarried, or weaned a child from breast-feeding can develop postpartum depression.[17] There are, however, numerous risk factors that have been associated with the development of postpartum depression, ranging from biological to

personal to family and social factors. The basic assumption is that the risk factors increase the experienced stress that the mother experiences, and the continuing stress then leads to depression.[10] One study done on Mexican mothers found that higher levels of emotional dysregulation made the mother more likely to develop postpartum depression.[30] Frequently, it has been found that patients with a negative world view may find a decrease in self-esteem and more distant relationships, which may lead to feelings of helplessness and depression.[4] While many studies have found such negative attitudes or emotional factors, there is no clear evidence of a consistent causal picture of postpartum depression in general. Obviously, not all patients who have negative attitudes, affect, or emotional dyscontrol end up diagnosed with depression.[10]

In most of the work that has been done, a prior history of depression and a family history of depression are the most predictive factors for the subsequent diagnosis of postpartum depression.[3,7,17,31,32,33] One study showed that a mother with a prior diagnosis of depression had a 30 percent risk of developing postpartum depression, and if there was a prior episode of postpartum depression the risk was increased to 70 percent.[3] Another study demonstrated that severe baby blues and a past history of depression were independent predictors that each raised the risk of postpartum depression threefold.[32]

While most of the studies on predictive factors focus on specific elements of the mother's condition, situation, and history, it is also true that there are things that have been found to be contributory that are related to the mother's experiences. For example, the following are things that mothers experience that are common and certainly understandable, but have also been associated with subsequent depression:

- Feeling tired after delivery, having fragmented sleep, not getting enough rest, and this is even more true when the mother has had a C-section
- Feeling overwhelmed with a new or additional baby, and doubting maternal ability
- Feeling stress from the changes in work and home routines; needs for perfectionism and being the "Super Mom"
- Feelings of loss of such things as identity, control, slim figure, attractiveness, and others
- Having less free time, feeling a loss of control over one's time, having less time with husband and friends, and having to stay home most of the time[17]

Summarizing the most predictive factors for postpartum depression, the following are frequently found to be related to its subsequent development:

- Previous episode of postpartum depression
- Lack of support

- Family history of depression
- Labor difficulties or complications
- Premature or late delivery
- Being separated from the baby
- Difficulties with the baby
- Severe premenstrual syndrome
- Marital problems
- Pre-existing psychological problems[18]

In addition to these factors, some of the other things that have been related to postpartum depression in the literature are:

- Adverse life events during the postpartum period
- Young maternal age
- Infants with health problems or "difficult temperaments"[36]
- Comorbidities of substance abuse
- Anxiety or somatization[37,38]

Further, there are some other more controversial factors like:

- Primiparous women
- Breast-feeding
- Length and difficulty of labor
- Multiple gestation
- Advanced maternal age.[37,38]

Other factors include such things as abrupt weaning, mood changes when taking birth control or fertility medication, and thyroid dysfunction.[21]

One very interesting study evaluated mothers at four months and twelve months postpartum. At the twelve month period it was found that 30 percent of all mothers were depressed, and if they had been depressed at the four month period the rate increased to 60 percent. In fact, the best predictor of depression at the twelve month time period was the severity of depression at four months. It was also found that women from non-English speaking backgrounds were more likely to remain depressed after four months. Other factors that were predictive of depression at twelve months were low maternal care in childhood, maternal dissatisfaction at four months, an attachment style characterized by anxiety over relationships, and an immature defense style.[39]

One important line of research has looked at the relationship between anxiety and subsequent diagnosis of postpartum depression. Very simply, women with anxiety disorders during pregnancy were more likely to develop postpartum depression later.[35] This is true even when controlling for antenatal depression.[34]

When looking at the impressive lists of factors that have been associated with postpartum depression it is clear that prior history of depression or anxiety

disorders is a major predictive factor. However, it is equally clear that things like feeling a loss of control over one's life, difficult family or personal circumstances, and lack of support are also contributory. It is also true that having a difficult baby might be a factor as well, but it is not easy to determine if the baby's problems are a cause or perhaps an effect of the mother's difficulties—or more likely, perhaps a little of both.

When looking at risk factors for postpartum psychosis, a slightly different picture emerges, but that is not surprising since it seems to be a distinct and different type of disorder. Similarly to postpartum depression, the principal predictor of postpartum psychosis is a history of psychosis in previous pregnancies. Other predictive factors include a history of bipolar disorder and a family history of psychosis.[41,45,46] Risk is also associated with initial severity. In a subset of women with onset of psychotic symptoms within two years, the recurrence risk approached 100 percent.[40]

An entirely different but entirely understandable approach to trying to understand risk and causality for postpartum depression deals with the physical and biological factors associated with pregnancy and birth. This is, of course, understandable since it is obvious that there are many changes that do occur. However, although postpartum depression may be triggered by hormone changes, it is not clear the extent to which these factors may truly be causal.[17] It does appear that thyroid changes and especially thyroiditis make a mother high risk for postpartum depression.[4,42] It is also true that hypothyroidism may be associated with mild depression, but for patients with postpartum depression there are mixed results relating depression with thyroid levels.[4] It has also been found that women with early postpartum anemia are also at high risk for postpartum depression.[43]

Much of the research in this area has focused on the "female" hormones estrogen and progesterone. This makes good sense because estrogen levels, like progesterone, fall 90 to 95 percent in the first 48 hours after delivery.[4,44] The rapid withdrawal of progesterone occurs with the delivery of the placenta, and has been proposed as a potential complicating factor in postpartum depression.[4] Hormone changes of this magnitude would certainly be expected to have some impact on psychological functioning. We know that estrogen has a role in memory and cognition as well as mood, and is linked to many elements of brain function. For example, estrogen effects dopamine, serotonin, and gamma-amino-butyric acid systems as well.[44] However, as compelling as this line of research is, there are no convincing studies linking postpartum depression to estrogen levels, and in fact, some studies link postpartum depression to high estrogen levels and other studies link it to low levels.[4] While women with postpartum depression don't appear to have different levels of hormones after birth

as compared to mothers without postpartum depression, it is hypothesized that they may be more sensitive to the hormonal milieu.[5]

Some studies have focused on prolactin levels which also rise during pregnancy and fall more slowly after delivery. While prolactin has also been implicated in postpartum depression, once again there are conflicting results and no clear conclusions.[4] Similarly, a strong correlation between cortisol levels and the incidence of postpartum depression is not clear because there are studies that demonstrate both high and low levels of cortisol described in women with the disorder.[4,26,45]

One theory looking at physiological factors has looked at the dysregulation of neurotransmitters serotonin and the other biogenic amines such as norepinephrine, epinephrine, and dopamine. While there have been some studies that showed a correlation between these neurotransmitter levels and postpartum depression, there are other studies that have found no relationship at all.[4] This may be surprising to some, since these substances have been related to depression in general, but their role in postpartum depression is not clear. Further, the catecholamines have not been studied as thoroughly, but low norephinephrine levels and the severity of postpartum depression have been correlated.[4] Finally, the hypothalamic-pituitary axis has been frequently studied and implicated in depression, but its role in postpartum depression is not clear either.[45]

In summary, there appear to be no simple answers regarding the causality of postpartum depression. Clearly there are many factors that are related, but how these things combine to influence the development of this disorder is not obvious. Perhaps the best summary came from Leopold and Zoschnick: "The data suggest that the etiology of postpartum depression is multifactoral. Causative components include both organic and conditional changes arising from both parturition as well as the mother's surrounding situation, which likely combine to influence the patient's psychological function."[10] Since this is a complex and complicated disorder it should not be surprising that the causal picture is also complex and complicated.

Treatments

Although postpartum mood disorders can be a sometimes persistent and troublesome problem, there is almost always some treatment that can be applied that can be very helpful. Although the etiology of these problems may be unique in many ways, there is no reason to believe that postpartum depression responds differently to treatment than any other type of depression. As with any depression, early identification and treatment are the keys to successful interventions.[46] The range of treatments that are used generally depend upon the severity of the

symptoms. Interventions typically range from things like support and support groups, group or individual psychotherapy, to medication or even to hospitalization or ECT.[4,5,26] Typically, acute treatment may be used from about six–twelve weeks, and is largely oriented toward symptom relief; continuation therapy may go for four–nine months and addresses issues like stabilizing the person and helping them to recover from the episode. Finally, maintenance therapy goes for nine months or more, and is generally used to prevent high-risk patients from having another acute episode.[46] If the postpartum depression is the first episode of depression, then it would be expected that treatment should last about six–twelve months. However, if the postpartum depression is a recurrence, then maintenance treatment might be needed. Often patients and sometimes even the providers will not carry treatment on long enough and this poses a risk to the mother and to the child. Two important things to remember are first, earlier treatment leads to a better prognosis, and second, more complete treatment will lead to better outcomes, fewer complications, and less chance of recurrence. Generally speaking, more intensive treatments like hospitalization and ECT are needed only if there are serious symptoms, psychotic symptoms, or if there is a suicidal or infanticidal risk.[5]

Treatment for the baby blues is often not formal since this "problem" tends to resolve itself in a relatively brief period. This is not to suggest, however, that it should be ignored. Patients who experience this problem can be significantly helped with very minimal interventions that will likely shorten the episode and reduce its impact. Simple reassurance and support are helpful, and emphasizing the importance of sleep and rest is usually adequate treatment; sometimes using minor tranquilizers may help with insomnia. Careful monitoring of this condition is important to ensure that it doesn't progress.[5,47]

Postpartum depression will usually benefit significantly from treatment, and unlike the baby blues, this condition does not spontaneously remit in a brief period and might last for months or even more. Consequently, it is more likely that this disorder will be the focus of formal treatment. Some of the work that has been done with postpartum depression has focused on non-pharmocological methods. Cognitive-behavioral and interpersonal psychotherapy as well as group psycho-educational therapy and supports groups have been very helpful, especially for mild to moderate postpartum depression. This is particularly true of mothers who are breast-feeding and who would rather not use medications.[5,49] It is important for all mothers to be aware of the fact that there is a broad range of treatment options available for the treatment of postpartum depression, and that this is a disorder that can be substantially helped with treatment. This has been shown in a variety of patient groups including some who are often not provided with a wide

variety of treatment options. For example, one study found that using a four-session interpersonally oriented group intervention reduced the occurrence of postpartum depression in a group of financially disadvantaged women.[48]

Much of the research on the treatment of postpartum depression has focused on the medications that have been used to treat it, and this is particularly true in the recent past as more effective and safer medications have become available. Particularly for moderate to severe depression, medications are more likely to be used, and often this is in conjunction with other forms of treatment like psychotherapy. When using medications it is important to understand the role of medication in the whole treatment plan of the patient, and this should include psychological as well as medical treatment. Often, the mental health provider and the prescribing physician will coordinate their efforts to insure that the patient is getting the best effect from the treatments that she is receiving.

The most frequently prescribed medications for postpartum depression are the selective serotonin reuptake inhibitors (SSRIs) like Prozac, Zoloft, Paxil, Celexa, Lexapro, and Luvox. These are usually the first choice of medication for postpartum depression and are used in the normal dosage range. Some of the newer selective serotonin/norepinephrine reuptake inhibitors like Effexor or Cymbalta might also be helpful. Other classes of newer drugs like Remeron (noradrenaline/specific serotonergic antidepressants), Wellbutrin (norepinephrine dopamine reuptake inhibitor), and Deseryl or Serzone (serotonin-2 antagonists/reuptake inhibitors) might be used if the SSRIs aren't effective or if they produce side effects. Note that Serzone is not often used any more because of some liver problems that have been found to be associated with its use. However, it should be made clear that the SSRIs are typically the first-line drug to be tried for postpartum depression.

An older class of drugs, the tricyclics (e.g., Elavil, Anafranil, Norpramin, Sinequan, Adapin, Tofranil, Aventyl or Pamelor, Vivactil, and Surmontil) or tetracyclics (Ludiomil) can be helpful, especially if there is insomnia, but frequently these drugs are not used because they have more troublesome side effects in general. When using any of the tricyclic or tetracyclic medications, the usual strategy is to start off the patient on a lower dose, gradually move them up to the lowest therapeutic dose, and leave them there for two–four weeks. If they haven't shown any improvement by that time then the dosage should be increased. If dosage increases don't lead to symptomatic improvement, or if the side effects are too troubling, then the drug should be stopped and another tried.[5]

Occasionally, anxiolytic medications like Valium, Xanax, Klonopin, Librium, and Ativan can be used if anxiety and/or insomnia are the principle symptoms.[5] However, these drugs can also be problematic because of side effects, increased

tolerance with continuing use, and the possibility of dependence. As such, they should never be used with a person who has a substance abuse history unless there are no other options, and even then they should be used with care.

At times, estrogen alone or with antidepressant medication has been used for postpartum depression, and this has been found to be helpful in some cases.[5] However, the antidepressants, and especially the SSRIs, still remain the first-line of treatment with respect to medications.

It is very important for providers to determine before delivery whether or not the mother is high risk for postpartum depression or postpartum psychosis. If there is a prior history of recurrent depression or previous postpartum depression it might be wise to start the mother on a prophylactic course of antidepressant medication before delivery. If there is a prior history of postpartum psychosis or bipolar disorder, then the physician may choose to use lithium prior to or within 24 hours of delivery. This has been found to minimize the risk of recurrent post-partum psychosis. Unfortunately, there is not much literature on prophylaxis for non-pharmacological forms of treatment.[5]

One thing of concern to many mothers is the impact of medication on their baby if the mother is breast-feeding. Of course, under such circumstances, the mother and her physician must look at the risks and make the appropriate deci-sion.[5] In terms of the antidepressants, most of the tricyclics have a very low degree of transfer into the breast milk and are considered safe. SSRIs vary in terms of how much is transferred into the breast milk, with Prozac transferring the most, Celexa a more moderate amount, and Paxil the least.[5,18,50,51,52] In general, it would appear that with SSRIs the shorter the half-life of the drug, the less transfer of medication into the breast milk and therefore the safer it is for the child. With respect to antidepressants, reports of toxicity in breast-feeding infants are rare, but the long-term effects are unknown.[5]

Mothers who are being treated with valproic acid or carbamazapine should avoid breast-feeding because these drugs have been linked to hepatotoxicity in infants. Similarly, mothers who are taking lithium should not breast-feed since this compound is secreted at high levels in breast milk and may cause toxicity in the infant. Finally, it is recommended that mothers should avoid breast-feeding if they are taking any psychotropic medications when the infant is premature or has hepatic insufficiency. These infants may have difficulties metabolizing the medications in breast milk.[5] What really needs to be remembered here is the importance of common sense. A mother who really wants to breast-feed her baby should be able to do so unless it would be risky for the child. If the mother needs to take medication for her psychological condition, then she and her physician need to discuss the risks and strategies for keeping the mother healthy and the child safe. Further, mothers who are high risk and who are not

on medications and want to breast-feed should probably be put in some type of non-pharmacologic type of treatment to make sure that the mother's and child's needs are being met, and that the mother's psychological condition is being adequately treated.

PREVENTION

Probably an area that is more important than treatment is prevention. To the extent that we can successfully prevent a problem, treatment may not even be necessary. This is not, of course, to suggest that treatment isn't important, because it most certainly is. However, it is also true that the best treatment is always prevention, and this is true of postpartum depression as well. Prevention should begin well before birth, but it must continue postpartum if it is to be effective. When discussing prevention, we can describe three different types or levels of prevention. Primary prevention refers to activities that are intended to reduce the incidence of a given disorder in the population as a whole. Thus, this would refer to activities that all expectant mothers or women who are planning to get pregnant should be involved in. In fact, these would be things that all of us should probably do anyway. For example, good nutrition, exercise, relaxation and rest, adequate sleep, recreation, appropriate socialization, having alone time, and so forth, are things that all of us should do whether male or female, pregnant or not, or even planning to be pregnant or not.

Secondary prevention has to do with working with people who are high risk for a given disorder and may even be displaying some mild symptoms, but who have not yet manifested the disorder in question. Thus, for these people, the key is to intervene in such a way as to keep the problem from getting worse and finally becoming a disorder. Tertiary prevention has to do with taking patients who have been diagnosed with a problem and intervening in such a way as to keep the diagnosed problem from getting worse or perhaps decompensating into something more serious. The goal here is to minimize the expected negative outcomes from a specific disorder.

Thus, when we look at prevention, it is important to think in terms of working at this *before* a given situation actually becomes a problem—that is, primary prevention. As with treatment, prevention too works best when it is done early. From the provider's standpoint, the key is to make sure that all women who are pregnant, planning to be pregnant, who are of childbearing age, or who have recently delivered a child are being carefully monitored for symptoms of depression or any other psychological problems for that matter. Of course, at the primary care site, patients should be monitored for these issues under any circumstances, but it is often the case that mental health

issues are not monitored as carefully as medical issues. This is not always due to the provider's lack of awareness, but may also be due in part to the patient's unwillingness to discuss these issues with their physician. The provider should try to provide the kind of atmosphere that makes discussing these types of issues simply a part of what is normally done. By attending to these types of issues as part of normal health care, many of the postpartum psychological problems can be eliminated or at least minimized.

Mothers or expectant mothers can certainly do many things to help insure that they will be as healthy postpartum as they can be. As mentioned above, we these include good nutrition, exercise, relaxation and rest, adequate sleep, recreation, appropriate socialization, alone time, and so forth. Since pregnancy and birth are expected to be happy and rewarding times, we often forget how stressful and difficult they can be. When mothers don't take care of themselves physically and psychologically, there is usually a price to pay. When mothers are feeling overwhelmed or angry, it is easy to see how they might take it out on the baby or on their family. To avoid this we usually recommend:

- Relaxation (yes, there is time—find it)
- Cognitive restructuring (looking at things differently)
- Problem solving (seeing what is bothering them and finding different ways to deal with the situation)
- Communication (not suffering in silence—talking to people about how they feel and what is bothering them)
- Humor (there is usually something humorous in any difficult situation, and this will help them keep it in perspective)[18]

It is also true that often when mothers are feeling overwhelmed or angry and they find themselves getting angry or resentful toward the baby, they then feel terribly guilty and feel that they are being a bad mother. It is terribly important for mothers to maintain and nurture the mother-baby bond, and this is even more important when the mother is having a difficult time. It is also important that mothers don't overcompensate for perceived weaknesses by doing even more than they would normally want to do. Mothers should maintain a consistent and intentional pattern of caring for the mother-child bond. This is important to the mother and to the baby. Some of the things that can be done include:

- Nurse or feed the baby frequently
- Provide a quiet place for the baby to rest, and rest when he/she does
- Hold and talk softly to the infant often
- Keep the baby warm, dry, and fed
- Involve others in caring for the baby

+ Take time with the other children (if there are any)
+ Go outside with the baby when the weather permits
+ Take some time for themselves[18]

Mothers should also be particularly nurturing of themselves—even more than usual. Some advice for all mothers includes such things as:

+ Talk to someone about their feelings (a professional if necessary)
+ Take time to talk with their spouse or partner—about how they feel and about normal kinds of things as well
+ Let people help them—don't try to do everything themselves
+ Do something for themselves every day—even if it is only for 15 minutes
+ Rest (e.g., nap when the baby does)
+ Exercise
+ Pay attention to their nutrition—avoid alcohol, nicotine, and caffeine
+ Keep a journal
+ Set goals—they can be simple, but do so every day
+ Give themselves permission to feel overwhelmed
+ Don't spend a lot of time alone—they don't have to; they can get dressed, go for a walk, go to the store, visit a friend, and so forth
+ Spend time alone with husband or partner
+ Talk to their medical provider if they feel the need to see a mental health professional, and get a referral
+ Talk to other mothers
+ Join a support group[17,18]

In addition, there are some things that a husband or partner can do that will also help. For example:

+ Listen and validate the mother's feelings
+ Avoid criticizing or judging
+ Be patient
+ Give the mother some breaks from child care and home care
+ Support the mother's decision to get help (medically, psychologically, around the house, or with the child)
+ Talk to their physician or a mental health professional themselves[18]

One additional step that prospective or new mothers might take to help themselves falls into the realm of nutrition. All prospective or new mothers should be aware of the importance of good nutrition, and should comply with the nutritional guidelines and supplements that are recommended by their physicians. Since one of the major complaints that is heard from new mothers is the difficulty they have with weight or with gaining weight after delivery, this is often a significant and worrisome issue. Dieting while pregnant or nursing is

not usually recommended, but maintaining good, well-balanced meals is very important. One line of research also suggests that prospective or new mothers use omega-3 fatty acids as a dietary supplement. There has been a lot of interest recently in omega-3s as a way to reduce the risks of cardiovascular disease. This is where most people have heard about them. However, omega-3 fatty acids are also used to help treat people with chronic inflammatory illnesses, and even more recently to help augment the treatment of certain psychiatric conditions. A recent study very convincingly demonstrated that, around the world in many different cultures and climates, there is a strong correlation between postpartum depression and how much fish is eaten. Specifically, the more fish that is consumed the lower the rate of postpartum depression, and this relationship is so strong as to be very compelling.[53] While we know that correlation does not imply causation, this high of a correlation certainly is suggestive of a functional relationship of some type.

There are a number of sources of omega-3s that are easily accessible. Fish, fish oil capsules, and flax seed oil are the most common sources. One concern about fish and fish oil capsules is the potential for toxins to be present. Unfortunately, there are probably no safe water sources in North America today, and there is no way to be certain of fish from the ocean. Many experts recommend that we not have fish or sea food more than once per week. The concern over fish oil capsules seems not to be as well-founded, however. Particularly, if the fish oil is "concentrated," this indicates that it has been processed in such a way as to eliminate the toxic substances. Also, if the fish oil has been processed under nitrogen instead of normal air, then the fish oil won't oxidize and smell fishy. To determine the safety of the product, you should read the label, ask your pharmacist, or go to the Web site www.consumerlab.com which will tell you more about the product you are looking at and what it contains.[53]

Some people will try to avoid the fish problem altogether by getting their omega-3s from non-marine sources like flax seed oil. This is certainly a good thing, and flax seed has its own advantages. However, the omega-3 fatty acids in flax seed are the shorter molecules, and don't have all of the benefits of those found in the fish oils. Consequently, it would seem that using fish oil capsules and flax seed would be a good combination, and also help reduce the likelihood of a mother getting postpartum depression.[53] Of course, it is strongly recommended that anyone who is interested in trying to use dietary supplements to augment or complement their medical care should inform their physician as to what they are doing or would like to do. The best way to proceed with these types of treatments is to make sure that everyone who is involved is aware and on board with what is being done. Do not begin supplementing your diet with a variety of substances without first discussing it with your physician.

CONCLUSION

As should be clear from the above discussion, postpartum mood disorders are complex and complicated phenomena about which we are only very recently finding out more. The most important thing to remember, of course, is that when detected and accurately diagnosed, these problems can be treated effectively and significant help can be provided. The other side of this coin is that when untreated, these disorders can create serious problems for mothers, children, and others in the family as well. Being aware of this type of problem, being willing to talk about it, and being open to appropriate preventative and treatment options are vitally important for mothers and for medical providers as well.

There is an impressive range of effective treatments that are available today, but the most obvious ones are also the simplest and easiest—awareness, concern, and support. Particularly for baby blues, these are usually adequate "treatments." When the problems are more severe, there are many very good psychological types of interventions that can be very helpful. If a patient doesn't know how to contact an appropriate mental health provider, they should discuss this with their primary care physician who should be able to make an appropriate recommendation. It is important that the mental health provider has experience dealing with mood disorders, and specifically with postpartum depression.

In addition to psychological interventions, there are also currently many good medication options to treat this condition. If a mother feels that she might be a candidate for medication, she should discuss this with her physician and the options should be considered. It should also be remembered that if the depression is serious or recurrent, medication alone will not likely be adequate treatment. Even with milder forms of depression, psychotherapy will usually reduce the probability of recurrence, and should be part of the treatment package.

Similarly, if the mother would like to consider nutritional or complementary forms of treatment like omega-3 fatty acids, they should also discuss this with their physician. While there is compelling evidence that this might be very helpful in minimizing the impact of postpartum mood disorders, this should not be undertaken without a thorough discussion with the mother's physician. Although very safe, these compounds do impact us in different ways, and care must be taken to use such complementary and/or supplemental treatments responsibly and with full awareness and coordination with the appropriate providers.

Finally, when the postpartum problems are very serious, hospitalization in addition to medication might be necessary. This is not usually long-term, and the typical treatment plan tries to get the mother back with her baby and family

as soon as it is safe. When necessary, hospitalization can certainly minimize some of the serious and potentially tragic results that need not occur. Similarly, as frightening as ECT might sound, it is safer today than ever before. While never a first-line treatment, it has proven to be helpful in situations where other treatments have not worked, especially if the mother's or baby's life is at risk. It is important that all appropriate treatment options be kept open and that when a mother is suffering from a postpartum mood disorder that the most appropriate treatment be made available in a timely fashion.

The goal of this whole area of care is simple. We want to insure the safest, healthiest, most positive and supportive environment for new mothers and their babies as is possible. To the extent that this is done, we know that there will be fewer problems in the future for both the mothers and the children, and that this is good for families and for society. Treatment and prevention of these disorders is available and inexpensive—especially when we look at the costs, both human and financial, of inadequate or unavailable treatment.

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Persons with Mental Retardation: Scientific, Clinical, and Policy Advances

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Michael is trying to wait patiently with his mom at the clinic, but he is starting to get frustrated. He is hungry and just plain tired of seeing doctors all the time. As he begins to pace around the room, his mom pulls out a book to try to entertain him, but the attempt comes too late. Michael's impatience has already escalated, and a full-blown tantrum has begun. As his mother tries desperately to calm Michael, she notices the eyes of the other patients begin to rise from their reading materials and all fix on her and her son. She takes a deep breath and braces herself for just one more event to add to the list of incidents she has dealt with in Michael's 14 years of life. "If *only* he would use his words," she thinks to herself, as she tries to calm him.

When we think of groups within our society that face special problems or challenges, we generally consider minority groups, or those encountering poverty, illness, or psychiatric disorders such as depression. Rarely do we consider children or adults with mental retardation or their families. Some would even argue that persons with mental retardation are one of our society's most unacknowledged, under-appreciated "special groups." And yet, persons with mental retardation live in every city, state, and region of our country.

Even within the world of social services, persons with mental retardation are generally accorded less respect or interest. Consider the American Psychiatric Association's *Diagnostic and Statistical Manual*, now in its 4th text revised edition (*DSM–IV–TR*).[1] In *DSM–IV–TR*, under the class of "Disorders Usually First Diagnosed in Infancy, Childhood, or Adolescence," mental retardation is the first disorder examined (pp. 41–49). But at the same time, only a small number of researchers in clinical psychology, adult psychiatry, or child psychiatry study persons who have both mental retardation and psychiatric disorders, those with so-called dual diagnoses. Moreover, various professionals have predicted that mental retardation would soon become the triumphant Cinderella of the mental health field, but such predictions were made in 1927,[2] 1966,[3] and 1997.[4] Similarly, subspecialties concerning mental retardation exist, but are not prominent, in education, nursing, social work, child development, clinical genetics, and pediatrics.

Why are persons with mental retardation so often ignored? To us, the answer involves misunderstandings of several types. First, many professionals and lay people consider mental retardation as a rarely occurring condition, something that happens so infrequently as to not require attention. Although we counter such thinking below, prevalence rates have rarely precluded scientific or clinical interest in children with many conditions that occur much more rarely than mental retardation. Second, persons with mental retardation are, by definition, less intelligent, and some (though by no means all) of these individuals are less able to advocate for themselves. Although movements are afoot to raise their levels of self-advocacy skills, the lessened ability to argue for their own needs may lead to a lessened public and professional awareness of persons with mental retardation and their families.

The third, and to us most important, factor is more subtle. Simply stated, many professionals feel that persons with mental retardation are somehow less interesting, less worthy of their professional time and attention. They judge persons with mental retardation as being of less interest scientifically, and, compared to groups with other psychiatric or medical problems, less capable of being the subject of a cure or of major advances that will increase these individuals' functioning. Partly as a result, mental retardation has assumed a less prominent role in many scientific and social service fields.

We disagree with each of these views. We start with the belief that persons with mental retardation are intrinsically interesting in their own right, with strengths, challenges, and concerns that relate to all of us. We are also intrigued by the way in which the difficulties faced by persons with mental retardation intersect with so many societal, public policy, and legal concerns. Finally, persons with mental retardation inform us about many interesting scientific issues in clinical psychology and psychiatry, developmental psychology, genetics, and other fields.

At the risk of yet again proclaiming a Cinderella-like period for mental retardation, in this chapter we emphasize the re-emergence of mental retardation as a societal, policy, and research concern. To explain this rise, we first provide the basics of mental retardation, its definition, prevalence, levels of impairment, and causes. We then describe the many diagnostic and treatment issues involving the dually-diagnosed population with mental retardation, before expanding our scope to functioning in families of a child with mental retardation, individuals with mental retardation as parents, and issues of abuse and criminality. We conclude by describing how many of the field's advances lead to further questions for researchers, clinicians, and society as a whole.

MENTAL RETARDATION: THE BASICS

When Michael was born, his mother did not notice anything peculiar about him nor during her pregnancy, as compared with his two older siblings. Yet, as weeks turned to months, she noticed he was not reaching his milestones at the same rate as his siblings did; and when he was still not sitting up or babbling at 9 months, she began to be concerned. The excessive visits to doctors and medical clinics began before Michael's first birthday, but no one could really tell her what was wrong with her son. In fact, he did not receive his first diagnosis until he was two years old—"developmentally delayed." Michael's mother began early intervention services with Michael as soon as they were offered to him, shuttling him to occupational, physical, and speech therapy once a week. When he was school-aged and placed in a special education classroom, Michael received another diagnosis, this one more upsetting to his mother—Michael had an intelligence quotient (IQ) of 54; he had mental retardation.

Definition and Diagnostic Criteria

Although most of us have an everyday, common-sense definition of the term, mental retardation is actually not so simple to define and, historically, its definition has been the source of considerable controversy. For the most part, however, most professionals subscribe to the following three-factor definition of mental retardation. To quote *DSM–IV–TR*,[1] mental retardation involves:

 A. "Significantly subaverage intellectual functioning . . . ;
 B. "Concurrent deficits or impairments in present adaptive functioning . . . ; and,
 C. "The onset is before age 18 years" (p. 49).

The first factor involves deficits in intellectual functioning. Using appropriate, standardized psychometric tests (e.g., the latest Stanford-Binet, Wechsler, Kaufman, or other IQ tests), individuals are considered to fall within the mental

retardation range when their IQs are at 70 or below. Due to errors of measurement, diagnostic manuals—including *DSM–IV–TR*[1] and the manual of the American Association on Mental Retardation (the main professional group in the field; AAMR)[5]—all allow for some leeway in this "IQ-70 criterion," usually up to IQ 75. Still, significant intellectual impairment constitutes one criterion for a diagnosis of mental retardation.

But such intellectual deficits should also involve a so-called real-world component. The second criterion therefore involves deficits in adaptive behavior. Deficits in adaptive behavior involve a lessened ability to perform "daily activities required for personal and social sufficiency" (p. 1).[6] In the newly revised Vineland Adaptive Behavior Scales, the three domains of adaptive behavior include *communication*, or communicating one's needs to others; *daily living skills*, or performing such tasks as eating, dressing, grooming, and toileting; and *socialization*, or following rules and working and playing with others. In *DSM–IV–TR*,[1] 10 domains of adaptive behavior are proposed, with deficits in two or more domains constituting evidence of impairments in adaptive behavior. Although the presence of 10 separate domains and the "2 of 10" criteria for adaptive deficits have been harshly criticized,[7] most would agree that lower intelligence should not constitute the sole criterion of whether a person has mental retardation.

The third criterion involves onset during the childhood years. Unlike both the intellectual and adaptive criteria, childhood onset has received little criticism. To most professionals, mental retardation should be differentiated from problems associated with Alzheimer's or other degenerative diseases, traumatic brain damage that occurs during the adult years, or other adult-onset diseases or conditions.

Prevalence

How many persons have mental retardation? Given the three-factor definition, this issue is not so clear-cut even in a theoretical sense. Assuming that IQ has a mean of 100, a standard deviation of 15, and follows a Gaussian or bell-shaped distribution, one would expect 2.28 percent of the population to have IQs of 70 or below (i.e., two or more standard deviations below the mean). But other considerations lead to prevalence estimates that are much less than 2.28 percent.[5]

Consider two criteria of the mental retardation diagnosis, below-70 IQ and adaptive deficits. If, in addition to IQ levels of 70 and below, adaptive deficits are also involved in the definition of mental retardation, then the prevalence rate depends on the correlation between levels of intellectual and adaptive behaviors. If all persons with IQs below 70 showed adaptive impairments, then

the 2.28 percent prevalence rate would hold. But if many persons with below-70 IQs do not show adaptive impairments, then a smaller figure would result.

What is the correlation between adaptive and intellectual functioning? Different studies lead to varying conclusions. One problem concerns different correlations for groups at different levels of functioning. For persons with more severe levels of mental retardation—that is, those with IQ 50 and below—the correlation between the two is reasonably high. Most persons with IQs of 50 or below require some degree of help in everyday living. With IQs in the 50 to 70 range, however, the correlations between IQ and adaptive behavior are much lower. Considering two persons with an IQ of 60, one individual might require intensive, lifelong supports, whereas another might need no help whatsoever. The degree to which IQ and adaptive behavior are not perfectly correlated lowers the overall prevalence rate.

Other issues also enter in. Prevalence estimates of 2.28 percent assume both a constant rate of diagnosis at different ages and a life expectancy that mirrors that of the general population. Both appear unlikely. Prevalence rates of mental retardation go up from about age 6–17—roughly, the period of formal schooling—and are lower before and after these ages.[8] Similarly, the life expectancies of individuals who are at the lowest IQ levels (IQ < 20) and who are nonambulatory fall well below the 70- to 80-year average life spans currently found in the United States and other Western countries.[9] Similarly, several genetic mental retardation syndromes frequently lead to comorbid health conditions that lower a person's life expectancy (see below). Age-related fluctuations of rates of diagnosis and shorter life expectancies likely lower the prevalence rate of mental retardation in our society.

What, then, is the prevalence of mental retardation? Recent estimates are below 2 percent of the population, generally from 1.0 to 1.5 percent.[8] Given a current U.S. population of almost 300 million people, 3.0 million or more Americans have mental retardation.

Levels of Impairment

Like any group of people, those with mental retardation differ one from another. Historically, professionals have divided persons with mental retardation into four categories based on IQ: mild, moderate, severe, and profound mental retardation.

As Table 2.1 illustrates, these four levels of impairment are based on IQ levels, not on adaptive functioning. Thus, different persons—particularly in the mild mental retardation range—may vary in their ability to perform most tasks of everyday living. A second feature of the level-of-impairment classification is that

Table 2.1
Levels of Impairment for Individuals with Mental Retardation

Mild mental retardation (IQ 55-70) constitutes 85 percent of all persons with mental retardation.[1] As adults, many individuals hold jobs, marry, raise families and are indistinguishable from those without mental retardation.

   Moderate mental retardation (IQ 40-54) is the second most common level of impairment. In contrast to those with mild mental retardation, these individuals are often diagnosed at the preschool age. Many with moderate mental retardation have an organic cause for their mental retardation. Although some require minimal support, most persons with moderate mental retardation need help throughout life. Increasingly, however, these individuals hold jobs in the outside workforce as unskilled laborers.

   Severe mental retardation (IQ 25-39) refers to more affected persons, the majority of whom suffer from clear organic causes. Many such persons show concurrent physical or ambulatory problems, as well as respiratory, heart, or other conditions. Most persons require special assistance throughout their lives. As adults, many live with their parents or in supervised group homes; most work in either workshop or "preworkshop" settings.

   Profound mental retardation (IQ below 25) involves persons with the most severe levels of intellectual and adaptive impairments. These persons generally learn only the rudiments of communicative skills, and intensive training is required to teach basic eating, grooming, toileting, and dressing behaviors. Persons with profound mental retardation require lifelong care and assistance. Almost all show organic causes for their mental retardation, and many have severe co-occurring conditions that sometimes lead to death during childhood or early adulthood. Some persons with profound mental retardation can perform workshop or preworkshop tasks, and most live with their parents, in supervised group homes, or in small, specialized facilities.

no attention is given to the cause or etiology of the person's mental retardation. Thus, individuals with different causes for their mental retardation (or no clear cause at all) are considered together as long as they are at roughly comparable levels of IQ.

   Although this classification of mild, moderate, severe, and profound mental retardation is well-known, the most recent AAMR classification manuals[5] have proposed changing these IQ-level categories to those based on a person's needs for intermittent, limited, extensive, and pervasive support. Although praiseworthy in its focus on the interaction between the person and that person's environmental needs (as opposed to focusing solely on the person's problems), the AAMR approach is cumbersome. As a result, most professionals continue to use the level-of-impairment categories in describing subject groups.[10] Similarly, in surveying mental retardation guidelines used by the 50 states plus the District of Columbia, Denning, Chamberlain, and Polloway[11] found that 44 states continued using the level-of-impairment classification system, 4 used the 1992 AAMR manual as the basis of their regulations, and 3 states used

neither model. To most professionals, the level-of-impairment system remains the most used system.

Etiology

Although mental retardation is caused by many conditions, the field has historically focused on the person's level of functioning, paying scant attention to the individual's cause of mental retardation. Recently, however, this situation has changed, with recent years showing a major shift toward etiology-related studies, particularly as they relate to genetic mental retardation conditions. Consider the numbers of behavioral research articles on Williams syndrome, Prader-Willi syndrome, and fragile X syndrome. From the 1980s to the 1990s, the numbers of behavioral research articles on Williams syndrome increased from 10 to 81; on Prader-Willi syndrome, from 24 to 86; on fragile X syndrome, from 60 to 149. Even in Down syndrome (DS), the sole etiology featuring a longstanding tradition of behavioral research, the amount of behavioral research almost doubled—from 607 to 1,140 articles—from the 1980s to the 1990s.[12]

Definition and Principles

Such increased numbers of research articles reflect the growing sense that groups with different genetic disorders do differ behaviorally from one to another. This sense has led to a growing field of behavioral phenotypes, which refers to "the heightened probability or likelihood that people with a given syndrome will exhibit certain behavioral and developmental sequelae relative to those without the syndrome" (p. 523).[12]

Before describing the behavioral phenotypes of different genetic syndromes, it is necessary to describe the main characteristics of behavioral phenotypes. Three aspects are especially noteworthy:

1. *Probabilistic nature.* In describing heightened probabilities and likelihoods, the Dykens[12] definition highlights the probabilistic nature of behavioral phenotypes. Many, but rarely all, individuals with a given syndrome will show that syndrome's so-called characteristic behaviors.

2. *Total and partial specificity.* The second characteristic refers to whether etiology-related behaviors are unique to only one genetic disorder (total specificity) or instead common to two or more disorders (partial specificity). Examining the many different studies so far, it appears that both total and partial specificity occur, with some etiology-related behaviors unique to a single syndrome, whereas others are common to two or more syndromes.[13] But given the vast number of genetic (and other) causes of mental retardation and the relatively few ways to show behavioral

    outcomes, this second, partially specific pattern probably occurs more
    often.

3. *Multiple domains.* Although in this chapter we focus mainly on maladaptive
   behavior-psychopathology of different genetic disorders, behavioral pheno-
   types can be found in many domains. Different genetic disorders predispose
   individuals to specific cognitive, linguistic, or adaptive strengths or weak-
   nesses, or ages of rapid versus slowed rates of development. At times, indi-
   viduals with a specific syndrome may even show a propensity to display a
   single behavior, such as the self-hugging behavior of many individuals with
   Smith-Magenis syndrome.[12]

Behavioral Phenotypes of Three Genetic Syndromes

Although many genetic disorders are associated with mental retardation, we
here briefly describe only three syndromes. To flesh out these descriptions, we
also provide brief case vignettes of these syndromes in Table 2.2.

Down syndrome, or trisomy 21, is the best-known form of mental retardation.
DS is also the most prevalent form known to be associated with a chromosomal
abnormality, occurring once in every 800 live births. First described in 1866 by
John Langdon Down,[14] DS has been the focus of intensive genetic and behav-
ioral research. Children with DS usually have characteristic physical features
including epicanthic folds around the eyes, a protruding tongue, short stature,
and hypotonia (weak muscle tone). DS often occurs together with such medical
conditions as heart defects and respiratory problems, particularly during the first
year of life. Although in the past individuals with DS had short life spans, medi-
cal treatments have improved life expectancies for persons with DS to approxi-
mately 50 years.[15]

Three behavioral characteristics appear in many individuals with DS. The
first involves cognitive-linguistic strengths and weaknesses. In various studies,
persons with DS appear particularly impaired in language. Such impairments,
which are more pronounced than overall levels of mental age (MA), occur in
linguistic grammar[16] and in expressive (as opposed to receptive) language.[17] In
addition, most individuals with DS show problems in articulation.[18] Conversely,
persons with DS often show relatively higher performance on tasks of visual
(as opposed to auditory) short-term memory.[19]

A second behavioral issue involves the rate of development, with children
with DS developing at slower rates as they get older. Such slowing of develop-
ment may relate to age-related changes or to difficulties these children have
in achieving certain cognitive tasks (e.g., language).[20] A third, possibly related
change concerns Alzheimer's disease. Neuropathological signs of Alzheimer's
disease appear to be universal by age 35 or 40 in individuals with DS, although
the dementia associated with Alzheimer's does not appear (if at all) in most
persons with DS until decades later.[21]

Table 2.2
Individuals with Down Syndrome, Prader-Willi Syndrome,
and Williams Syndrome

Down syndrome. Erica is a 19-year-old who recently graduated from high school. Her mother is concerned because, while Erica was always very social and well–liked in school, she has now become less upbeat and more passive. She has also put on weight. To make matters worse, the vocational training program that she was slated to attend after graduation has a long waiting list, so most of Erica's days are spent watching TV alone at home, and helping to take care of a neighbor's cat. She and her mother have now decided to ask a social worker to identify alternative training programs to keep her busy. They also agreed to take walks after dinner. Erica, once an avid swimmer, is going to re-enroll in the Special Olympics swimming program.

Erica's story demonstrates several concerns for young adults with Down syndrome:

- the propensity for adults with Down syndrome to become more sedentary and withdrawn,
- the need for programs that foster lifelong learning in adults with mental retardation; and
- the importance of continued social interactions as these individuals age.

Prader-Willi syndrome. Greg is a 14-year-old who loves to complete puzzles. First diagnosed with Prader-Willi syndrome shortly after birth, Greg has since demonstrated the classic features of the syndrome: hypotonia in infancy, delayed milestones, and a marked interest in eating and food that began at age five. Greg is having trouble at school because of difficulties with transitions. Greg's weight is also creeping up, as are instances of food seeking. His family has started locking the refrigerator and cabinets, as they have learned that if he knows that he can not get into food, he will get involved with other things, like his puzzles. Indeed, Greg, who has just completed a 50-piece puzzle with remarkable speed, looks up with a grin. "This one was easy," he boasts, "I thought you said you had hard puzzles!"

Greg's case demonstrates issues for many youngsters with Prader-Willi syndrome:

- a host of behavioral concerns, especially hyperphagia and compulsions,
- the need for the management of his diet and behavior to be carefully monitored,
- strengths in expressive vocabulary and visual-spatial skills (e.g., puzzles), and
- targeting strengths as incentives (i.e., "puzzle time") to ease compulsions and transitions.

Williams syndrome. Rachel is a highly energetic 12 year-old. She is very social and feels that everyone is her friend. Her parents are concerned because, while they love her friendly nature, they are worried about her poor social judgment and vulnerability as she enters adolescence. After being diagnosed with Williams syndrome at eight months and coming through a corrective heart surgery, a fussy infancy, and a period of language delay, Rachel quickly caught up. On formal testing as a first grader, her vocabulary exceeded her overall cognitive abilities. Recently, Rachel has been worrying about things more and more often. Her anxiety can at times get out of hand, but never to the point that it stops her from going outside. Along with her growing anxiety, Rachel has a growing interest in music. Her father observes that music calms her and playing the piano helps her to settle down for the night. Recently, Rachel has asked to try another instrument so that she can play in the school band, or to join the glee club, so that she can sing with others.

Rachel demonstrates many of the key behavioral features of Williams syndrome:

- a strong social orientation coupled with poor social judgment and disinhibition;
- well-developed expressive language skills,
- a worried, fretful stance; and
- an interest in music that may or may not reflect remarkable talent but that is emotionally compelling and gratifying.

Prader-Willi syndrome is caused by missing genetic material from chromosome 15—either a deletion on chromosome 15 coming from the father or two chromosome 15s from the mother (maternal uniparental disomy). Most individuals with Prader-Willi syndrome are short in stature (about five feet tall in adulthood) and show extreme hyperphagia (i.e., overeating). Indeed, hyperphagia and resultant obesity have long been considered the hallmarks of Prader-Willi syndrome, and most cases of early death in the syndrome relate to complications of obesity (e.g., type II diabetes, respiratory and circulatory problems).[22] Many individuals show obsessions and compulsions that are similar in level to those with clinically diagnosed obsessive-compulsive disorder.[23]

Intellectually, most children with Prader-Willi syndrome show relative weaknesses in sequential processing, or tasks involving consecutive, step-by-step order in problem solving.[24] In contrast, these children perform well on tasks requiring integration and synthesis of stimuli as a unified whole, or simultaneous processing. Many individuals with Prader-Willi syndrome also demonstrate particularly high-level abilities in jigsaw puzzles. Such skills, which on average exceed those of typical children of comparable chronological ages, are especially shown by those having the deletion form of this disorder—as opposed to the maternal uniparental disomy.[25]

Williams syndrome is caused by a micro-deletion on chromosome 7. Children with this syndrome generally show a characteristic facial appearance, along with heart and other health problems.[26] As many as 95 percent of children with Williams syndrome show a hypersensitivity to loud sound. Along with an overly social, outgoing personality, children with Williams syndrome also show a wide variety of anxieties and fears.[27]

Apart from these medical and psychiatric issues, recent attention has strongly focused on the interesting cognitive-linguistic profile shown by most of these children. Children with Williams syndrome show relative strengths in language; for many years it was thought that these children might even perform at chronological age-levels on a variety of linguistic tasks. Although age-appropriate performance in language has now been found in only small percentages of children with Williams syndrome,[28] these children nevertheless show relative strengths in language, as well as in auditory processing and music. Conversely, many children with Williams syndrome perform especially poorly on a variety of visuospatial tasks.

Taken together, studies on genetic syndromes highlight the many ways in which one's cause of mental retardation affects specific behavioral outcomes. Such studies also shift the ground from a research field focused on a single, heterogeneous "mental retardation" group to a field interested in various types of mental retardation, many with their own etiology-related behaviors and genebrain-behavior

relations. In discussions of remaining issues, then, we consider the evidence both in terms of mental retardation in general as well as in different genetic conditions.

MALADAPTIVE BEHAVIOR-PSYCHOPATHOLOGY

Despite his cognitive limitations, his minimal expressive language capabilities, and his placement in a special education classroom, Michael always struck his mother as a happy boy. His smile always had a way of brightening even her hardest day. Michael loved to laugh and always wanted to be around people. He had a good group of friends from his neighborhood, whom he enjoyed seeing in the halls of his school.

Since he hit the teen years, however, Michael's disposition had changed. He did not seem as happy. He preferred to be alone, and he rarely went outside to play. Michael's mother noticed that fewer things made him happy, and more things threw him into a temper tantrum. His withdrawal and moodiness were what brought him and his mother to the clinic's waiting room on this day.

Historically, mental retardation has been separated from mental illness. Indeed, when clinicians encountered psychiatric symptoms in persons with mental retardation, these issues were interpreted as being a part of, or caused by, intellectual deficit. In the early 1980s, Reiss and Szyszko[29] even identified the phenomenon of "diagnostic overshadowing," the idea that, to most professionals, the mental retardation diagnosis overshadowed all other psychiatric concerns.

But in recent years, professionals have begun to appreciate that mental retardation and mental illness often go together. Persons with mental retardation are at heightened risks for mental illness, with the prevalence of comorbid psychiatric conditions in persons with mental retardation estimated to be 3–4 times that of the general population.[1] In addition, all types of mental illness are seen in those with mental retardation.

These statements, however, mask the many difficulties inherent in the study of mental illness in persons with mental retardation. For this reason, we first discuss diagnosis of psychopathology in persons with mental retardation and the many advances and challenges that have arisen in this area. We then tackle the issues of prevalence, risk factors, etiology, and treatment.

Challenges in Diagnosis

In contrast to diagnosing individuals of average intelligence, psychiatric diagnoses of persons with mental retardation are beset by several difficulties. The first concerns self-report. In order to diagnose many types of psychopathology, clinicians rely on the person's own self-report of symptoms. Thus, self-reported

feelings of hopelessness and depression constitute major symptoms of mood disorders, and disorganized speech and reported hallucinations or delusions help the clinician make a diagnosis of schizophrenia. Obviously, if persons are less able to communicate their feelings and thoughts, it becomes more difficult to make these diagnoses.

Another complication concerns the distinction between one's mental age and chronological age. Particularly before mental age plateaus in late adolescence (16–18 years on most IQ tests), individuals with average IQ have mental ages that are roughly the same as their chronological ages. In children with mental retardation, however, chronological ages exceed mental ages. When a 14-year-old adolescent or a 30-year-old adult has a mental age of six years, it becomes difficult to determine which behaviors are normal for someone with his or her level of development.

Fortunately, some headway has been made on both these issues. In the case of individuals who are non-verbal or limited linguistically, diagnosis relies heavily on third-party reports.[30] However, the validity of such reports can be questionable. Moss argues that both respondent and informant should be interviewed, and have found that omission of either interview results in one-third of psychopathology going undiagnosed.[30]

Similarly, over the past decade, a movement has arisen to develop parent or caregiver-report measures of maladaptive behavior-psychopathology for children and adults with mental retardation. Because of the need to consider mental age as well as chronological age, several widely used assessment tools have been normed specifically on large, community-based samples of persons with mental retardation. These instruments include the Aberrant Behavior Checklist, the Reiss Screen, and the Developmental Behaviour Checklist. Each is specific to the concerns of persons with mental retardation and has a factor structure of maladaptive behaviors derived solely from persons with mental retardation. (For a review, see Dykens.[31])

As these measures have been developed and more widely used, several problems have arisen. First, the exact factor structures of different instruments have not always been identical. Second, problems in different domains do not always map onto *DSM* or other psychiatric categories. Although this mapping problem also occurs in children and adults without mental retardation, it becomes more of an issue in a group for which *DSM* categories may already be more problematic.[31]

Prevalence, Nature, and Correlates of Psychopathology

Despite the difficulties in providing accurate psychiatric diagnoses to persons with mental retardation, many such persons show significant psychiatric

impairments. A rate of approximately 40 percent seems likely, although different studies range widely. Koller, Richardson, Katz, and McClaren[32] found that 36 percent of their sample suffered from psychiatric impairments, whereas Gilberg, Persson, Grufman, and Themmer[33] reported a rate of psychiatric diagnosis that was 64 percent. More recently, Einfeld and Tonge[34] found the prevalence of psychopathology in individuals with mental retardation to be 40.7 percent. These percentages are in stark contrast to rates of psychopathology in samples without mental retardation, which are considered to be about 6 percent.[35] In addition, although showing all types of psychopathology, persons with mental retardation appear more prone to psychosis, autism, and behavior disorders, and less prone to substance abuse or affective disorders.[36]

In considering correlates of psychopathology, one sees major differences from samples without mental retardation. Unlike those without mental retardation, age and sex generally do not seem to affect the prevalence of psychopathology in persons with mental retardation.[34] Instead, the main influence on the amount and type of psychopathology is one's level of impairment. Einfeld and Tonge[34] found that persons with profound mental retardation (IQ < 25) have lower levels of psychopathology compared to persons with mild, moderate, or severe mental retardation. In contrast, individuals with milder levels of mental retardation (IQ of 50–69) had the highest rates of disruptive and antisocial behaviors. Other studies have found that individuals with milder levels of impairment also have higher rates of schizophrenia spectrum disorders, personality disorder, and depression.

Although the numbers suggest a higher prevalence of psychopathology in individuals with milder mental retardation, there may be high levels of unrecognized psychopathology in individuals with more severe levels due to difficulties in diagnosis. In comparison to persons with milder forms of mental retardation, individuals with severe or profound mental retardation are more likely to be diagnosed with such behavioral disorders as self-injury, stereotypies, and autistic behaviors.[37] Rojahn, Matson, Naglieri, and Mayville[38] found a significant, positive, and clinically meaningful relationship between these behavior problems and psychiatric conditions, but emphasize that the relationship is complex. It is therefore difficult to assess whether individuals at the lower end of the IQ spectrum truly have less psychopathology than those with milder levels of mental retardation.

Risk Factors and Vulnerabilities

Beyond increased rates of psychopathology per se, persons with mental retardation may have specific risk factors and vulnerabilities. In reviewing why

persons with mental retardation are at heightened risk, Dykens[37] suggests a variety of possible risk factors along the biopsychosocial spectrum. Psychological vulnerabilities may range from aberrant personality-motivational styles (including learned helplessness); to familial vulnerabilities stemming from family stress; to social factors such as poor communication skills and peer rejection; to biological factors such as the presence of seizure disorders or self-injurious behaviors.

In one of the few detailed studies of this issue, Dekker and Koot[39] investigated family and child factors that predicted psychopathology in children and adolescents with mental retardation one year later. Among the family factors predicting later child psychopathology, they found that parental psychopathology and single-parent families predicted later child psychopathology. Aspects of the child were also identified as risk factors, including inadequate daily living skills, chronic physical conditions, social incompetence, and negative life events.

Etiology

Etiology is another risk factor for psychopathology. We here describe separately psychopathology in DS, Prader-Willi syndrome, and Williams syndrome.

Down Syndrome

Children with DS generally show both lesser amounts and less severe types of psychopathology. Such studies include those comparing children with DS to children with (heterogeneous) mental retardation, as well as those comparing to children with Prader-Willi or other genetic syndromes. Such studies include those comparing children with DS to children with heterogeneous mental retardation, as well as those comparing to children with Prader-Will or other genetic syndromes (see Dykens[37] for a review).

Recently, however, the picture concerning psychopathology in DS has changed in several ways. First, several recent studies have examined changes in maladaptive behavior-psychopathology as children and adults get older. Dykens, Shah, Beck, Sagun, and King[40] noted that adolescents with DS may become more inward during the adolescent years, in addition to showing lesser amounts of stubbornness and other externalizing problems.[41] Although the reasons for such changes are unclear, one factor predisposing adolescents with DS to depression and other psychopathology seems to be less stimulation and programming.[42] Less activity and engagement with the world are probably risk factors for all adolescents with mental retardation, but a lack of activity may be especially harmful for adolescents and young adults with DS.

A second issue concerns a possible connection between DS and autism. Long thought to be protected from autism due to a generally social, upbeat personality (the so-called "Down syndrome personality"), recent studies have identified a small subset of children with DS who have autism or autism spectrum disorders. The percentage of such children is unknown, but a 5–10 percent figure seems likely.[43] Granted, the connection between autism and DS has received insufficient attention, and some connection between the two may occur due to lower IQ alone. Still, such ties of DS and autism are intriguing and may lead to increased understandings of both disorders.

Prader-Willi Syndrome

Although persons with Prader-Willi syndrome show high rates of tantrums, emotional lability, and peer problems,[44] the hallmark of the syndrome is its hyperphagia and impaired satiety response. Obsessive thoughts of food are common, as are unusual food behaviors such as foraging through the trash for food, stealing food, and eating unpalatable items.[44]

Although food-related problems are almost universal for individuals with Prader-Willi syndrome, these individuals also frequently exhibit other obsessions and compulsions. Common compulsions include hoarding, ordering, arranging, and needing to tell or ask, along with need for sameness in routine.[23] Such obsessions and compulsions usually begin in the two–five year period,[45] around the same age as the onset of hyperphagia and food seeking.

Recently, different types of psychopathology have also been linked to different forms of Prader-Willi syndrome. Besides having higher IQs,[46] those with the maternal disomy (versus deletion) form of Prader-Willi syndrome seem especially prone to severe psychopathology.[47] Current thinking is that the majority of individuals with maternal uniparental disomy develop severe, atypical psychosis during their early adult years. The nature, causes, and course of such psychotic disorders are all being actively investigated.[48]

Williams Syndrome

Although individuals with Williams syndrome tend to be outgoing and socially disinhibited, these individuals also show high rates of fears, anxiety, and phobia. In a sample of persons with mental retardation (but not Williams syndrome), Dykens[27] found that over 50 percent of respondents reported only two commonly occurring fears—of their parents getting sick and of getting a shot or injection. In contrast, over half of the group with Williams syndrome endorsed 41 different fears. Such fears ran the gamut from interpersonal issues like being teased (92%), getting punished (85%), or getting into arguments with

others (85%); to such physical issues as injections (90%), being in a fire or getting burned (82%), or getting stung by a bee (79%); to loud noises-sirens (87%), falling from high places (79%), and thunderstorms (78%). Such fears also relate to formal psychiatric diagnoses. In this same sample, 84 percent of individuals with Williams syndrome met most diagnostic criteria for phobia, and 35 percent of these individuals had symptom-related adaptive impairment.

Treatment

The history of treatment is mixed for clients with mental retardation. In the 1930s, persons with mental retardation were often included in psychotherapy.[4] This practice waned in subsequent years, as persons with mental retardation were thought to have problems with transference and insight, poor impulse control, and a reduced capacity for change.[49] More recently, psychologists have once again begun to recognize the utility of psychotherapeutic interventions, including cognitive therapy, relaxation therapy, and psychoanalytic or developmentally-based therapies. In all approaches, beneficial modifications include being aware of the client's language ability and of his or her developmental level.[4]

In addition to talk therapies, pharmacotherapy is widely used for both specific disorders and more general behavioral problems. In a population-based study, Spreat, Conroy, and Jones[50] found that 22 percent of adults with mental retardation were prescribed antipsychotic and 5.9 percent antidepressant medications. Examining prevalence rates of drug treatments in adults and children with mental retardation in institutions from 1966–1985, Singh, Ellis, and Wechsler[51] found 30–40 percent were prescribed psychotropic drugs, 25–45 percent anticonvulsants, and 50–70 percent psychotropic drugs, anticonvulsants, or some combination of the two.

Despite the potential utility of psychotherapy and of pharmacological treatments, no single professional group has a monopoly on knowledge of how to treat this population. In fact, a collaborative team approach to treatment best ensures that services are not fragmented. This multidisciplinary approach may include psychiatrists, mental health practitioners, behavior specialists, and case managers.[52] Such a multidisciplinary team can then provide services involving case management, social skills training, supported employment, family intervention, and behavioral strategies.

Although progress has been made in treating persons with dual diagnosis, many such individuals continue to go untreated. McCarthy and Boyd[53] found that over half (64%) of their sample of individuals with mental retardation and a psychiatric diagnosis or persistent behavioral problems had not received specialist mental health care. Potential reasons for lack of care include diagnostic

overshadowing by primary care physicians and a lack of specialized training in mental retardation throughout the mental health field. As McCarthy and Boyd note, the mental health of any individual is important, but it is critical for persons with mental retardation, who are particularly vulnerable to psychopathology.

MENTAL RETARDATION IN SOCIETY

The treatment of dually-diagnosed persons constitutes the tip of the iceberg relative to the societal issues concerning persons with mental retardation. We address three of these issues below.

As Michael's turn with the psychologist finally roles around, his mother begins telling her story from the beginning. She talks about how hard it was to drive him from appointment to appointment, and how all of the early intervention staff came to her home on an almost daily basis. She talks about the adjustments her family had to make, and how her two older children did not always understand why these "big people" always came to play with Michael and not with them. She ended her story, however, with all that Michael had taught her and her children. Despite some bumps in her marriage shortly after Michael was born, she realized that he was a blessing and not the stressor she originally viewed him as. She noticed that her two older children were more patient with other children with disabilities, and she loved to overhear when they defended Michael's behaviors to their friends. She told the psychologist she wouldn't have changed a thing about the past, but now, as he's growing older, she's worried about his future; will he be able to live on his own, who will care for him when she no longer can, and will he have a job?

Families of Individuals with Mental Retardation

Historically, families have been considered to suffer from raising their child with mental retardation. Following Solnit and Stark's[54] idea that mothers mourn—as in a death—the birth of the child with disabilities, various authors proposed stage models of mourning and spoke of parental depression and sibling and family problems. In the early 1980s, however, Crnic, Freidrich, and Greenberg[55] proposed a stress-and-coping model of parental adaptation. According to this model, the child with mental retardation could be considered a stressor in the family system, but, like any stressor, could result in family functioning that was worse, the same, or even improved.

This more positive, albeit realistic model of family coping changed the field in several ways.[56] Instead of considering all parents as necessarily negatively

affected by their child with mental retardation, parents were now considered to vary widely. Researchers performed more within-group studies to identify which parent, child, or family factors might lead to better or worse coping. Such studies found that the parent's active (as opposed to passive or emotional) problem-solving styles were very beneficial,[57] and that children with fewer behavior problems helped in parental and familial functioning. Similarly, children whose mental retardation was caused by genetic disorders leading to fewer maladaptive behaviors (e.g., DS) and to more upbeat, positive personalities (DS, Williams syndrome) often predispose better coping by parents and families as a whole.[58]

Similarly, studies of siblings also moved from a pathological to a stress-and-coping orientation. In the past, a brother or sister with a disability was thought to negatively affect the typically developing sibling. In a review of the sibling literature, however, Stoneman[59] found that, compared to siblings of same-aged typically developing children, most siblings of children with disabilities showed no differences in self-concept, perceived competence, self-efficacy, or internalizing or externalizing problems. Taunt and Hastings[60] also reported that having a sibling with a disability does not lead to pathology or maladaptive behaviors in typically developing children, although some children are harmed by the experience of growing up with a sibling with a disability.

The sibling experience also changes as the two offspring get older. As sibling relationships progress, typically developing siblings often assume roles related to helping, teaching, and managing their brother or sister with disabilities. They also help parents with caretaking responsibilities. Although for some siblings these role responsibilities limit their time with friends and decrease their social activities, siblings of children with disabilities on average do not have fewer social contacts than other children.[59]

When siblings enter adulthood, siblings become more concerned about the future of their sibling with mental retardation and about the caretaking roles they may be expected to assume. Krauss, Seltzer, Gordon, and Friedman[61] found that, as they age, many siblings report high levels of phone contact or weekly visits, and many report living within a thirty minute drive of their sibling with a disability. Activities often involve going to a restaurant, shopping together, and going to the movies.

These adult sibling relationships may also hold the key to solving one of our society's important, but little discussed, public policy issues. As in society as a whole, the population of persons with mental retardation is aging. At present, 526,000 individuals with disabilities 60 years and older live in the United States; by the year 2030, that number is expected to triple—to 1.5 million.[62] Given that over 60 percent of these individuals live in their parents' home, who—apart from siblings—will be caring for these aging

individuals when their parents can no longer do so? Such issues have clear, difficult implications for our entire society.

Parents with Mental Retardation

A second societal issue concerns parents who themselves have mental retardation. In the early 1900s, women with mental retardation were often prohibited from marriage, were institutionalized, and were involuntarily sterilized. The prevailing view was that people with mental retardation and their children were degenerate, criminally inclined, and insane.[63] In the mid-1900s, the focus shifted from fears of people with mental retardation having children, to a concern for the children of parents with mental retardation.

From the 1970s to the present, studies have dispelled many of the myths surrounding parents with mental retardation. The four most prevalent myths were that parents with mental retardation would: have children with mental retardation, have large numbers of children, be inadequate parents, and be unable to learn how to raise a child.

Children of Parents with Mental Retardation

In their review of the literature on parents with mental retardation, Holburn, Perkins, and Vietze[63] reported that approximately one-fourth of the children of parents with mental retardation will also have mental retardation. Furthermore, when both parents have mental retardation, the risk of their child having mental retardation is doubled, and the risk of having a child with mental retardation is higher when the mother as opposed to the father has mental retardation. When the parents with mental retardation are of lower socioeconomic status (SES), the children are at a higher risk for developmental delay (especially delayed expressive language) than those children born to middle-class families.[64]

Family Size

While many feared that people with mental retardation would have a large number of children, Espe-Sherwindt and Crable[64] reported that parents with mental retardation have either fewer or the same amount of children as other parents of the same SES. In addition, these parents were reported to have a realistic view of how many children they could handle raising. In addition, many parents with mental retardation reported that they did not want to have children at all.

Parents as Caregivers

Like mothers without mental retardation, most mothers with mental retardation provide adequate care for their children. Feldman, Towns, Betel, Case, Rincover, and Rubino[65] compared mother-infant interactions

of mothers with mental retardation to mothers without mental retardation. Mothers with mental retardation provided less prompting, praise, looking, imitating, playing, and talking to their infant. The children of these mothers also vocalized less than the infants of mothers without mental retardation. Although Tymchuk[66] found that the incidence of neglect was greater than the incidence of abuse by parents with mental retardation, it was unclear how rates of either neglect or abuse compared to rates for other parents of the same SES. Most reported neglect and abuse, however, was the result of ill-preparation for parenting, rather than purposeful abusive behavior.

Parent Interventions

Parents with mental retardation can learn good parenting skills. Unfortunately, few programs exist that teach parents with mental retardation how to raise a child and few parents with mental retardation have received any preparation for raising a child.[64] Another confounding factor is that parents with mental retardation have never been taught to seek out services when they need help. Consequently, they are less likely to approach professionals.

Factors related to better parenting skills include an IQ greater than 50, being married, and having fewer children, adequate financial support, and a willingness to accept help and support.[64] Unfortunately, many mothers with mental retardation are single, poor women who are under extreme stress and who suffer from depression. These mothers often lack self-confidence, a stable residence, and the skills needed to be an adequate parent.[63] Fortunately, early intervention and services have been shown to help parents with mental retardation to be good, nurturing parents.

As for the offspring, many feel stigmatized by certain characteristics and behaviors their parents exhibit.[67] Some also fear they may be like their parents. The most important outcome for the parent-child relationship, however, is the child's perception of the mother's caregiving style, which can have a very positive influence on attachment.

Child Abuse

Studies consistently find much higher than expected levels of child abuse and neglect for children with mental retardation (and all disabilities). While estimates vary greatly, children with disabilities may be from four–ten times more likely than children without disabilities to suffer from child abuse or maltreatment.[68]

In the most comprehensive study of this issue, Sullivan and Knutson[69] examined maltreatment among children with disabilities in Omaha, Nebraska. By merging public school records with Central Registry, Foster Care Review

Board, and police databases, these authors were able to account for over 50,000 children, from birth to age 21, and to determine maltreatment among the populations. They found a 31 percent rate of maltreatment of children with disabilities, as compared to a prevalence rate of 9 percent for children without disabilities. Children with disabilities were also more likely to be abused multiple times and in multiple forms. Behavior disorders, mental retardation, and learning disabilities were the most prevalent disabled types of children experiencing maltreatment. Children with mental retardation were four times more likely to be abused compared to children without disabilities. While more girls than boys are abused in the typical population, more boys than girls are abused among children with disabilities.[69]

Many possible causes have been suggested for why children with disabilities are more often abused than children without disabilities. As in abusive families of children without disabilities, family and parent stress have been identified as risk factors leading to child abuse. Factors increasing such stress include parents of low SES, parent under- or unemployment, and being a single parent. Social isolation, parental substance abuse, parents with mental illness or mental retardation, and a parent's own experience of abuse have also been shown to increase the risk of child abuse.[70]

Specific child characteristics can also increase stress experienced by parents and thus lead to child abuse. These characteristics include prematurity or low birth weight, discipline problems, sexual acting out, poor school performance, permanent or chronic conditions such as developmental disabilities or medical fragility, and difficult temperament.[71] The age of the child may also interact with disability status to increase the risk for sexual and physical abuse. Children with disabilities are maltreated at younger ages, leading to the importance of early intervention and support services for families with young children with disabilities. Furthermore, children with communication impairments may be at increased risk because these impairments may prevent them from communicating, either verbally or behaviorally, what has happened to them.[72]

Criminality

A final issue concerns criminality. Although many believe that people with mental retardation are over-represented as offenders in the criminal justice system, the facts are much more complicated. Reviewing the existing literature, Holland, Clare, and Mukhopadhyay[73] found little support that people with mental retardation were over-represented. Instead, being a male and being young were more predictive than mental retardation for involvement in the criminal justice system. Mental retardation did seem to increase the risk of illegal or antisocial behavior, but this risk was also greater if the individual was

socially disadvantaged in childhood and adulthood, was a substance abuser, and had a background of familial offending.

Barron, Hassiotis, and Banes[74] also investigated the characteristics of individuals with mental retardation who came into contact with the criminal justice system. They found that those with mental retardation began offending at a young age and frequently had a history of multiple offenses. In fact, 54 percent of their sample (61 individuals) first came into contact with the criminal justice system before they were 16 years old, and 21.3 percent had contact before 12 years of age. The mean number of offenses was 4.1; the most common offense was violence, followed by sex offenses and property offenses. Over a quarter of the group has spent time in prison as a result of their most recent offense. At the follow-up interview (10 months later), about half of the sample had reoffended. The group also had a high rate of psychopathology, especially psychotic illness (51.7%), and more than half had been prescribed antipsychotic medication (63.9%).

In addition to criminal behavior per se, other issues relate to persons with mental retardation within the criminal justice system. Specifically, Perske[75] reported people with mental retardation often confess to crimes they did not commit. In fact, almost half of the cases he examined had exonerated the individual with mental retardation through DNA testing. In addition, in all of the 38 cases examined by Perske, a lawyer was not present during the interrogation of the individual with mental retardation.

Such lack of attention to basic criminal rights—as well as the diminished capacity to advocate for oneself and to understand criminal proceedings—has led to an ongoing controversy about the status of persons with mental retardation within the criminal justice system. The most salient issue surrounds the death penalty. Should persons with mental retardation face death for their actions? In *Atkins v. Virginia*, 122 S.Ct.2242 (June 20, 2002), the Supreme Court held that the execution of any individual with mental retardation violated the Eighth Amendment's prohibition on cruel and unusual punishment. But this issue, like many others concerning persons with mental retardation, continues to reverberate throughout our society.

THE ROAD AHEAD

Advances in Research

Although persons with mental retardation have long been considered as so-called natural experiments, the ways in which such individuals tell us about typical or nonretarded functioning have increased exponentially in recent years. Consider three examples.

The first involves the use of different genetic disorders to examine gene-brain-behavior connections involving psychopathology. As noted earlier, children with Prader-Willi syndrome develop obsessions and compulsions beginning in the two- to five-year period,[45] and many persons with Williams syndrome show extreme levels of fears and phobias.[27] Simply put, what is the relation of specific genetic disorders, brain anomalies, and psychopathological outcomes? Although such questions are in their infancy, different genetic disorders indeed promise to tell us much about gene-brain-behavior connections and the development of psychopathology.

But the lessons of genetic disorders go beyond psychopathology and maladaptive behaviors per se. Various linguists and psycholinguistics, for example, have been intrigued by the way in which children with Williams syndrome show high levels of language in the relative absence of high-level cognition. Which aspects of language are less impaired or unimpaired, what is the connection between cognition and language, and what are the various modules of language itself? All are issues increasingly informed by individuals with Williams syndrome.

A third issue concerns the effects on others of individuals with specific types of mental retardation. If, for example, most families of children with DS are coping better than families of other children with mental retardation, which aspects of the children themselves, of parent groups, and/or of societal knowledge accounts for such better functioning? Conversely, why are children with mental retardation so much more likely to be abused, and are some groups more or less likely to be abused? In short, what is the elicitor of either positive or negative reactions from others?

Advances in Treatment

A similar set of advances involves treating persons who are dually diagnosed. Again, many findings point to treatment implications for specific genetic syndromes. Consider Williams syndrome and the way in which most such individuals show extreme fearfulness and phobias. These individuals also often show high levels of interest, participation, and (sometimes) skill in music.[76] Moreover, Dykens[77] has recently discovered that, in Williams syndrome, anxiety and music may be linked, such that participation and skill in music is associated with lessened levels of anxieties and fears. Granted, the direction of this association remains unclear. Can less anxious children better participate in music or does participation in music make children less anxious? Still, the connection is intriguing. Ultimately, music therapies may be especially promising in persons with Williams syndrome.

Advances in Society

So far, we have focused on the many societal problems associated with persons with mental retardation. We have considered issues of caring for aging persons with mental retardation and how our society seems ill-equipped to address the three-fold increase by 2030 in the above 60-year-old population with mental retardation. We have noted how children with mental retardation are more often abused, and issues relating to how such individuals function as parents and, at times, as perpetrators of crimes.

In contrast to these negatively-tinged issues, however, the picture has brightened considerably for persons with mental retardation within our society. Over the past 30–40 years, both children and adults with mental retardation are increasingly participating in all aspects of modern life. Whereas once many children and adults were institutionalized, we now see children attending integrated classes in regular schools. Most adults engage in some sort of work, and, although most still live at home with parents, our society at least acknowledges the living needs of adults with mental retardation. Even the problem areas addressed—aging, parenthood, abuse, and criminality—in some ways simply reflect the increased participation of individuals with mental retardation within our society.

We end this chapter, then, on a positive note. Without being too Polyannish or (again) predicting a Cinderella-period both for the field and for persons with mental retardation, the coming years appear promising. Using the past few decades as our guide to the future, advances seem clear in research, in treatment, and in society as a whole. If so, someday persons with mental retardation might even lose their status as one of our society's most unacknowledged, under-appreciated special groups.

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Autism Spectrum Disorders:
A Crisis of Urgent Public Concern

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Autism was once thought to be a rare disorder. In fact, it received little attention until 1943 when a psychiatrist, Leo Kanner, produced his case material identifying the unique features of this disorder in each of 11 children he observed at the Johns Hopkins Hospital in Baltimore.[1] Since this landmark paper, our knowledge of autism spectrum disorders (ASDs) has grown exponentially, especially recently. For example, we have learned that autism is not caused by cold, uncompassionate parents (refrigerator moms) as was once the commonly accepted speculation of causation. Today, alarmed by the explosion in the number of cases fof children and youth identified with ASD, advocacy groups are clamoring for more research into both the causes and potential educational treatments. As a result, major advances in understanding the biological bases of ASD are occurring, and more refined diagnostic practices and better educational and therapeutic interventions are becoming available.

Scientists, parents, teachers and therapists continue to be baffled at the apparent increase in prevalence of these pervasive developmental disorders. Research, however, is finding that early and intensive intervention can lead to improvement. Yet little is understood about the extent of the human tragedy that this illness imposes on children, families, and communities. When children with ASD become adults, the impact on society can only be imagined, for longitudinal research is scarce. In order to better understand the nature of the crisis, this chapter will present primary information about ASD including some of the promising educational/intervention techniques currently available.

AUTISM SPECTRUM DISORDERS: WHAT ARE THEY?

ASDs range from a severe form, called autistic disorder, to a milder form called Asperger syndrome (AS). No two individuals with ASD seem to have identical symptoms. A symptom may be mild in one person and severe in another. Persons classified with ASD vary widely in abilities. Some may demonstrate near- or above-average intellectual and communication abilities, while others may be severely developmentally delayed and totally lack spoken language skills. Therefore, the term autism spectrum disorders is used to refer to the broad range of subtypes and levels of severity that fall on this spectrum of pervasive developmental disorders (PDDs).

All PDDs are characterized by "severe and pervasive impairment in several areas of development: reciprocal social interaction skills, communication skills, or the presence of stereotyped behavior, interest, and activities" (p. 69).[2] Five PDDs are referred to as ASD. These include autistic disorder, childhood disintegrative disorder, Rett disorder, AS, and pervasive developmental disorders-not otherwise specified (PDD-NOS).[3] These PDDs range in severity, are usually diagnosed in childhood, are prevalent throughout life, and affect people from all socioeconomic and ethnic backgrounds throughout the world.

A Note about Terms

When reading the literature, it is important to remember that the term "autism" is often used either specifically to refer to autistic disorder or more generally to ASD. In addition, another term that is often used synonymously with ASD is PDD. This term is the diagnostic category heading under which the five specific diagnoses described briefly below are listed.

Autistic Disorder

The term autistic disorder refers to individuals, usually males, who exhibit these impairments prior to 36 months of age and are moderately to severely intellectually impaired. Diagnostic criteria for autistic disorder fall into three main categories: (1) qualitative social interaction impairments, (2) qualitative communication impairments, and (3) repetitive and restricted stereotyped patterns of behavior, activities, and interests.

As infants, these children show little interest in being held and may not be soothed by physical closeness with caregivers. They demonstrate significant limitations in eye contact, social smiling, and interactive play. As young children, they prefer to be alone and may not show anxiety when separated from family members. However, they may become anxious when there are

changes to their environment or routine. They often repeat the words of others, demonstrate repetitive motor behavior, and have strong attachments to objects. Such children commonly demonstrate delays in or total lack of spoken language development. As they grow older, they rarely share pleasure or excitement with others and have limited social interactions. They develop few or no friendships and often exhibit persistent and repetitive, ritualistic speech or behaviors.

Childhood Disintegrative Disorder

According to the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, Text Revision *(DSM–IV–TR)*,[2] children diagnosed with childhood disintegrative disorder (CDD) have behavior similar to those of children with autism disorder. However, children within this classification grow and develop normally for a period of time. They show typical social and communicative interactions and behavior for at least two years. Then, usually between three and four years of age, they begin to display "a clinically significant loss of previously acquired social skills or adaptive behavior, bowel or bladder control, play or motor skills" (p. 77).[2] These children, more often males, may have seizures and display very low intellectual functioning. While their disintegration is progressive, they do eventually stabilize and cease to deteriorate. Some do recover previously attained developmental skills. This disorder, fortunately, is very rare.

Rett's Disorder

Rett's disorder is another very rare disorder, occurring almost exclusively in females. After a period of apparently normal development, between six and twenty-four months, autism-like symptoms begin to appear. Head growth decelerates, motor skills deteriorate, stereotypic hand wringing and washing may begin, and she becomes socially and communicatively unresponsive. These individuals demonstrate severe impairments in language development as this disorder is usually associated with severe to profound mental retardation. Serious medical concerns include seizures, respiratory problems, and risk of sudden cardiac death.[2]

Asperger Syndrome

AS was named after Dr. Hans Asperger, a Viennese physician who first discussed it in 1944. The children described by Asperger had many of the same characteristics discussed by Kanner a year earlier. However, Asperger described children who were higher functioning and whose impairments were, primarily,

within the area of social interaction. AS was generally ignored until the 1990s when the American Psychiatric Association added the syndrome to its list of pervasive developmental disorders.[4]

This disorder can be especially puzzling to parents and professionals as these children tend to exhibit average to above-average intelligence, and have few, if any, distinctive physical characteristics. These children, usually males, are often misunderstood, and their behavior is misinterpreted. It is extremely difficult to diagnose this syndrome. The characteristics of children and youth with AS are most easily seen in situations that are often missed in a medical setting. These include: (a) interactions with peers, (b) stressful situations, (c) environments where the schedule or routine is not predictable, (d) when sensory stressors are apparent, and (e) when these children or youth encounter new situations.[5] Medical professionals must rely on reports from caregivers who observe their young patients in a variety of settings over time.

Pervasive Developmental Disorder-Not Otherwise Specified

PDD-NOS is thought to be a somewhat vaguely defined diagnostic classification that includes children who demonstrate "severe and pervasive impairment in the development of reciprocal social interaction or verbal and nonverbal communication skills" (p. 77).[2] Children and youth within this category do not meet the criteria for the other categories and generally fall at the higher functioning end of the ASD continuum. Their impaired verbal and nonverbal communication skills and/or stereotyped behaviors or interests do interfere with development of social skills.

There is often confusion between AS and PDD-NOS. However, individuals with AS typically do not have language delays and may read precociously or have extraordinarily rich vocabularies. Nevertheless, children with AS still struggle with the social aspects of language and nonverbal communication. Individuals with either classification, whose behaviors are less of a determent to their daily lives, are often referred to as having "high functioning autism."

HOW PREVALENT ARE AUTISM SPECTRUM DISORDERS?

Precisely how many people have ASD today is currently unknown. To date, there have been few scientific, population-based studies. Therefore, there is little reliable information on the prevalence of ASD. In the past, only those with severe autistic characteristics were diagnosed with autism; others were categorized as mentally retarded or developmentally delayed. However, within the last two decades, diagnostic criteria have broadened dramatically. Clearly service providers

are reporting dramatic increases in the numbers of children and families seeking services. To address the need for prevalence statistics with sound credibility, the Centers for Disease Control is launching the first integrated, multi-state, ASD prevalence investigation.[6] Hopefully, this cooperative alliance of researchers investigating the epidemiology of ASD in 18 states will yield accurate estimates of ASD and lead to widespread appreciation of ASD as a public health concern.

The Fastest Growing Developmental Disability

National organizations cite figures suggesting that, today, ASD is the fastest growing developmental disability. The National Center on Birth Defects and Developmental Disabilities estimates that using current criteria, up to 500,000 children and youth between birth and 21 years of age have an ASD. However, many are not diagnosed until school age or later, so their figures may underestimate actual prevalence.[7]

Autism is now at least the sixth most commonly classified disability in the educational system of the United States.[8] The most common disability classifications include specific learning disabilities, speech or language impairment, mental retardation, emotional disturbance, and other health impairments which often include children diagnosed with attention deficit/hyperactivity disorder (AD/HD). Between 1994 and 2003, the number of children being classified as having ASD increased six-fold from 22,664 to 141,022.[8] There is no doubt that more children are getting education services for ASD than ever before. However, it is necessary to remember that as the category of autism was only added in 1991, the growth in number of children classified may be, in part, due to the recent addition of this category.

Questions Continue

Extensive dialogue continues among professionals and parents as to whether or not the increase in demand for services is due to a true increase in prevalence or due to changes in how we identify and classify individuals with ASD. Recently, Laidler[9] made compelling arguments questioning prevalence data disseminated by the U.S. Department of Education. His contention is that the Department of Education figures are at odds with studies of the incidence of autism because the criteria used by school districts to categorize children as autistic are not rigorous or consistent from district to district or state to state. This is understandable as the diagnosis of autism is basically subjective. There are no objective findings, radiologic studies, or laboratory tests that are diagnostic of autism. There is also no distinct cutoff point between typical and autistic behavior. As federal law only allows 10 qualifying disabilities under

the Individuals with Disabilities Education Act, assessment criteria tend to be broad in an effort to serve those who appear to need service.

Therefore, it is currently impossible to present reliable data on the prevalence of ASD within our society. There is no question that today education is serving significantly more children and youth under the category of autism than in past decades. However, scientifically based research is not yet available to determine what role broader eligibility criteria, enhanced availability of services, and increased public awareness play in increasing the numbers being classified as having an autistic spectrum disorder.

Whether or not ASD is the first or second most common serious developmental disability is irrelevant when one considers the immense impact on families of any devastating developmental disability. All PDDs are conditions that demand urgent public attention and mobilization of resources to alleviate the inevitable stress and waste of human potential.

WHAT CAUSES AUTISTIC SPECTRUM DISORDERS?

Experts do not know exactly what causes ASDs. In opposition to earlier theories of causation, currently experts as well as parents are thoroughly convinced that autism and related disabilities are not caused by cold and unresponsive caregivers (refrigerator mothers). Instead, family and twin studies suggest an underlying genetic vulnerability to ASD. Research involving families with at least one child with ASD indicate a higher incidence of recurrence in later births.[10] In addition, an increased frequency of occurrence is found in patients with genetic conditions such as fragile X syndrome and tuberous sclerosis.[11]

The basis of this vulnerability appears to be neurophysiological. There are differences in how the individual's central nervous system responds to and integrates incoming sensory information. A large number of studies have found that autistic individuals have a compromised immune system. One hypothesis is that the child's compromised immune system predisposes the child to ASD. Although the search for specific autism genes is under way, scientists believe that genetic inheritance is not the sole contributor to autism.

Immunizations

In recent years, concerns have been adamantly expressed that immunizations, particularly measles, mumps, and rubella (MMR) vaccine, may precipitate autism. The culprit is thought to be thimerosal, a mercury-based preservative used in MMR vaccine. Thimerosal has been removed in vaccines in the United States since 1999. However, many parents are still concerned as vaccines already disseminated were not recalled. Despite the media reports of

anecdotal evidence from parents and members of the U.S. Congress blaming immunizations for the development of symptoms characteristic of ASD, there is currently not enough scientifically based evidence to support a causal link between autism and MMR or other vaccines used in immunizations.

Several large-scale studies concluded that there was no causal relationship between childhood vaccination and the development of ASD.[12] Given contradictory information and vocal concerns of such prominent experts in the field of autism as Dr. Bernard Rimland,[13] the controversy over immunizations continues. Therefore, a panel from the Institute of Medicine is now closely examining these studies as well as studies looking at exposure to lead and other heavy metals.[14] This is a very positive step as additional independent and unbiased clinical studies are urgently needed.

Emerging Diagnostic Approaches

Biological understanding of the basis of ASD is only beginning to move forward with the aid of modern technology and availability of both normal and autism tissue samples to perform postmortem studies. With the emergence of new brain imaging tools such as computerized tomography (CT), positron emission tomography (PET), and magnetic resonance imaging (MRI), study of the structure and function of the brain is possible. Postmortem and MRI studies indicate that several major brain structures are implicated in autism.[15] These include the cerebellum, cerebral cortex, limbic system, corpus callosum, basal ganglia, and the brain stem. Other research is focusing on the role of neurotransmitters such as serotonin, dopamine, and epinephrine.

Researchers are not only eager to find and eliminate the cause or causes of ASD, but they are also searching for ways to identify ASD as early as possible so that early intervention may be provided. The growth dysregulation hypothesis holds that the anatomical abnormalities seen in autism may be caused by genetic defects in brain growth factors.[16] During the first two years of life, brains of young children with autism experience brain growth spurts unlike those of typical children. If so, then it may be possible that sudden, rapid head growth in an infant may be a warning signal that can lead to early diagnosis and effective biological intervention or possible prevention of autism. Other causative or complicating factors being investigated include allergies to food and medicines, gastrointestinal abnormalities, maternal exposure to mercury, and lack of essential minerals.

Organizational Initiatives

While we wait eagerly for scientific breakthroughs that might determine the cause of ASD, it is imperative that parents quit blaming themselves. It is

equally important that the general public continue to push for the resources needed to provide effective education of children and youth with ASD, support for their families, and the public services necessary for adults with ASD to live as normally as possible.

It is important to realize that, on both a national and an international level, communities are waking up to the need to address the crisis presented by the presence of ASDs. For example, The Children's Health Act of 2003 (SB 1951, Public Act 93-0495) created the Interagency Autism Coordinating Committee (IACC). This committee includes the directors of the National Institute of Mental Health, the National Institute of Neurological Disorders and Stroke, the National Institute on Deafness and Other Communication Disorders, the National Institute of Child Health and Human Development, and the National Institute of Environmental Health Sciences, as well as representatives from eight other national agencies. This committee was instructed by Congress to develop a 10-year agenda for autism research. Their plan was presented at the first Autism Summit Conference. Included in this plan was the establishment of eight network research centers that are conducting research in the fields of developmental neurobiology, genetics, and psychopharmacology. In addition, 10 Collaborative Programs of Excellence in Autism are studying the world's largest group of well-diagnosed individuals with autism.

What is truly significant about the results of the Children's Health Act of 2000 is that data from all of these entities will be analyzed through a data coordination center. Thus, we can soon expect significant progress in understanding the prevalence and causes of ASDs.

HOW ARE AUTISM SPECTRUM DISORDERS DIAGNOSED?

While the causes of what appears to be a dramatic rise in the number of children and youth with ASD are the subject of much debate and study, experts are in agreement on one thing: early diagnosis and intervention is crucial to the possibility of a good prognosis. However, it is not enough to agree that early identification is critical as the process of diagnosis is fraught with difficulty, making the goal of early intervention sometimes easier said than done.

As stated earlier, there is currently no single test to diagnose ASD. There are no definitive biological signs or symptoms of ASD. In fact, as the name "autism spectrum disorder" suggests, ASDs cover a wide range of behaviors and abilities. Children with ASD develop at different rates in different areas of growth. They might show lags in language, social, and cognitive skills, while their motor skills might be on target. Some children with ASD can learn a hard skill before

they learn an easy one. Although they may be good at things like putting puzzle pieces together, they might have trouble with developing a skill that is easy for others, like talking with other children.

ASD is diagnosed through careful observation/assessment of behavior and knowledge of the individual's developmental history. Parents and pediatricians who suspect that a child might have a PDD are encouraged to seek further evaluation from qualified professionals such as neurologists and psychiatrists who are familiar with this group of disorders.

Early Clues

In infancy, signals for formal developmental evaluation include no babbling, pointing, or other gestures by 12 months of age; no single words by 16 months of age; and no two-word spontaneous phrases by 24 months of age. Loss of previously learned language or social skills is an important high risk signal at any age.

The American Academy of Neurology recommends a dual process of diagnosis: "(1) routine developmental surveillance and screening specifically for autism to be performed on all children to first identify those at risk for any type of atypical development, and to identify those specifically at risk for autism; and (2) to diagnose and evaluate autism, to differentiate autism from other developmental disorders."[17]

At level one, specialists are encouraged to look for the high risk signals noted above and to listen very carefully to parents, as they tend to be highly sensitive and specific in detecting global developmental deficits.[18] Diagnosis of ASD is a complex clinical process that is dependent on close observation and informed clinical opinions. Unfortunately, there are currently few places in the country where professionals are thoroughly trained in the diagnostic process. These procedures are not learned easily in workshops or sessions at a conference. To develop sophisticated clinical judgment, training, supervision and feedback from experts are required.

Behavioral Criteria

To receive a diagnosis of autism or a related disorder, children must meet a certain number of the behavioral criteria as described in the *DSM–IV–TR*.[2] As these criteria are more applicable to children around the age of three or older, diagnosis at an earlier age can be more difficult. In general, even though ASD involve a wide spectrum of symptoms, individuals do have three common areas of deficit: communication problems, impaired social relationships, and unusual patterns of behavior. Communication skills and social interactions are

not simply delayed or similar to that of a younger child, instead they are often unusual or even bizarre. The behaviors and communication cues of children with ASD are frequently very difficult to interpret.

To identify conditions of ASD as soon as possible, Ozonoff, Rogers, and Hendren[19] urge screening in infancy. Clinicians should pay particular attention to young children who do not look at faces and avoid eye contact, who do not attempt to imitate others, who do not respond when called by their name, who do not attempt to show objects to others by pointing at things, and who do not, in general, show interest in others. In order to focus on such behavioral symptoms, collaboration with caregivers is essential. While language delays are the symptom that most commonly captures the attention of parents, problems in other areas of development hold the key to being able to recognize behavioral signs at earlier and earlier ages. As children become preschoolers, parents may notice that children line up toys rather than play with them and may become obsessive about watching and rewatching segments of a particular video or DVD. Older children who are verbal may obsess in talking about particular topics of interest.

Children with ASD can have other associated problems that include sleep disturbances, gastrointestinal problems, seizure disorders, and sensory and auditory processing disorders. Some may be extremely sensitive to touch, certain textures, or sounds. However, at the same time, they may appear to be extraordinarily gifted in music, memory, math, or drawing.

Once high risk signals have been recognized, children must be referred for more intensive screening that should include a formal audiological assessment and screening for lead poisoning. Specific screening for ASD may include formal tools such as the Checklist for Autism in Toddler (CHAT) for children from 18 months and the Autism Screening Questionnaire for children four years of age and older.[20]

Multidisciplinary Screening

A complete evaluation is a comprehensive multidisciplinary process, usually beginning with the pediatrician who insures that a thorough family history, medical, and neurological evaluation is completed. In addition to the pediatrician and audiologist, this multidisciplinary process can include one or more of the following professionals: psychologists, neurologists, speech-language pathologists, child psychiatrists, occupational therapists, and physical therapists, as well as special educators. Included below are some of the areas of concern to these specialists who must be clinically knowledgeable of the unique characteristics of ASDs.

Speech-Language and Communication Evaluations

Comprehensive assessment of both preverbal and verbal individuals should include assessment of both receptive and expressive language and communication, voice and speech production, and in verbal individuals, a collection and analysis of spontaneous language samples to augment scores on formal language tests. Specific attention will be paid to whether or not available speech and language skills are functional and appropriate.

Cognitive and Adaptive Behavior Evaluations

Cognitive instruments used by well-trained psychologists should provide a full range of standard scores that do not depend on social ability and should include independent measures of verbal and nonverbal abilities. A measure of adaptive functioning such as the Vineland Adaptive Behavior Scales should be included.[21]

Sensorimotor and Occupational Therapy Evaluations

Experienced occupational or physical therapists assess fine and gross motor development, sensory processing abilities, tactile sensitivity, unusual or stereotyped mannerisms, and the impact of these elements on the individual's life. Occupational therapists should be concerned with how well the individual can function given daily life requirements, including those of play or leisure activities, self-care, or work tasks.

Neuropsychological, Behavioral, and Academic Assessments

These assessments should be performed as needed and should include social skills and relationships, educational functioning, learning style, motivation and reinforcement, and self-regulation. Such assessment is absolutely necessary for an early intervention specialist and educators to assist in procuring services and planning intervention/instructional activities.

Family Assessment

When children are under the age of three, to determine eligibility for service, appropriately trained professionals are expected to collaborate with families in assessing their resources, concerns, and priorities. It is expected that they will guide the development of an Individualized Family Service plan that will determine the services to be publicly provided and the outcomes to be realized

as a result of these services. After the age of three, Individual Program Plans are to be developed collaboratively by both parents and educators.[22]

A Final Word on Screening and Diagnosis

As young children with ASD can respond to their environment in both positive and negative ways, and with behavior that is inconsistent, a common mistake is often made. That mistake comes from the "wait and see" mentality. Because we have learned that early intervention can be effective, it is essential that professionals and parents do not fall into the wait and see mentality. Parents' concerns should not be dismissed because of the absence or presence of any one behavior. Instead, concentration should be on the bigger picture to look for patterns of behavior.

WHICH DISORDERS MOST COMMONLY ACCOMPANY ASD?

Accompanying or comorbid disorders often have medical implications and treatment needs separate from those for the general characteristics of ASD. For example, a high percentage of individuals with ASD have some form of sleeping disorder. Lack of sleep and the resulting fatigue can exacerbate symptoms. Then there is the impact of lack of sleep on caregivers that must be considered. It is important to be aware of the side effects of medications and the effect of the caffeine found in sodas and chocolate. A reliable bedtime schedule is essential, while daytime naps might be discontinued for older preschoolers who are not sleeping through the night.

A significant portion of children with ASD also suffer from a seizure disorder such as epilepsy. Even if seizures are not serious, they can increase anxiety and heighten communication difficulties. As there are medications that can control seizures, it is essential that medical assistance be acquired immediately when seizures present themselves. Other medical conditions that can co-occur with ASD are fragile X syndrome, neurofibromatosis, tuberous sclerosis, and phenylketonuria. Obviously, close collaboration with medical practitioners is essential to handle the conditions of comorbidity.

Although children with ASD have been found, as a group, to hear as well as other children, they may have auditory processing problems. Such processing problems may prevent them from understanding the meaning of sounds they hear or distinguishing sounds in the foreground from sounds in the background. These problems may have a negative impact on academic performance and should be considered when assigning seats in the classroom or setting up the environment for a child expected to complete his or her homework.

Children with autism disorder have a high rate of pica or the tendency to eat inappropriate substances such as soil, paint, and paint chips.[23] This tendency can lead to bowel obstruction and the possibility of overexposure to lead. Thus, the importance of tests for lead poisoning during screening and diagnosis is obvious. Other conditions of comorbdity to consider include depression and anxiety disorders, especially with AS. Gastrointestinal disorders, higher rates of food allergies, and problems with attention and concentration are often reported by parents. Surprisingly, whether a tendency toward AD/HD is a symptom of ASD or a separate disorder is yet to be determined.

Many autistic children have unusual sensitivities to sounds, sights, touch, tastes, and smells. High-pitched intermittent sounds, such as fire alarms or school bells, may be painful to autistic children. Sensitivity to tactile and auditory stimuli may be responsible for the child's withdrawal or avoidance of social interaction, as well as difficulty tolerating certain sounds and processing speech. This avoidance, in turn, can interfere with the processes of attachment and development of social skills, as well as with the development of communication skills. Thus many children with autism have very limited speech and language skills.

Putting together the comprehensive puzzle of causality and the implications of disorders as complicated as those of ASD is not easy. Nevertheless, researchers are detecting more correlations between ASD and other disorders. These discoveries may make it possible for clinicians to break these disorders into more discrete elements that lend themselves more readily to effective treatment.

WHAT EDUCATIONAL INTERVENTIONS AND STRATEGIES ARE AVAILABLE?

Even though every individual diagnosed with a spectrum disorder may be different, the families of these individuals all face the same overwhelming challenge. That is, the challenge of finding the best treatment or intervention for each complex condition. This means that parents not only have to deal with the emotional impact of a devastating diagnosis, but they also have no clear choice of educational intervention options. This dilemma was underscored by the National Research Council's report published in 2001[24] in which a committee of experts who were charged with the task of integrating the scientific, theoretical, and policy literature concluded "there are virtually no data on the relative merit of one model (of intervention) over another" (p. 171).

Nevertheless, there are a number of intervention approaches that are showing positive changes in children who receive intensive services from an early age. It is

important to note that these interventions tend to focus on various aspects of the disorders and on different developmental domains. Because of the variability in the targeted skill areas, the underlying theoretical assumptions, and the strategies employed, the selection of a particular approach (or combination of approaches) should depend on the needs and characteristics of each individual with ASD, and the concerns and preferences of family members.

Research does suggest that children with ASD can improve considerably with certain kinds of interventions. Although research does not conclude that there is one best model of intervention, it does suggest that, "Several features shared by most efficacious treatments, regardless of model, philosophy, or type, have been identified: they begin early, are intensive (at least 25 hours a week), are individualized and developmentally appropriate, and are family centered, involving parents at every level" (p. 23).[25] The best programs are those that incorporate a variety of multidisciplinary best practices based on individual needs.

Features of Program Effectiveness

To promote scientifically validated methods of instruction for children and youth with ASD, The Committee on Educational Interventions for Children with Autism, Division of Behavioral and Social Sciences and Education, National Research Council provided a list of program features that the committee found to be critical to the effectiveness of the early intervention experience for young children.[26] These include:

- Entry into the program as soon after diagnosis as possible
- Active engagement in intensive instructional programming for the equivalent of a full school day, five days a week, with full-year participation available depending on age/developmental level
- Repeated, planned teaching opportunities organized around relatively brief periods of time
- Sufficient amounts of adult attention in one-to-one and small group settings to meet individualized goals
- Inclusion of a family education component
- Low student/teacher ratios (no more than two young children per adult)
- Strategies for ongoing program evaluation and assessment of individual children's progress, with program adjustments made accordingly.

The committee also prioritizes six foci of interventions. These include focus on functional, spontaneous communication; social instruction that is delivered throughout the day in various settings; the teaching of interactive play skills; instruction that facilitates the development and transfer

of cognitive skills; positive, contextual behavioral support; and focus on functional academic skills.[27]

Evidence-Based Practices

The No Child Left Behind Act of 2001[27] repeatedly emphasizes the importance of utilizing instructional and intervention methods that have been subject to scrutiny and scientific evaluation. In an attempt to assist parents in recognizing when educational practices are linked to scientifically based research, Simpson and colleagues[3] recently published a critique of the most commonly used interventions and treatments for individuals with autism-related disabilities. Before discussing some of the interventions that have been found either to have evidence of significant and convincing empirical efficacy or are promising, it is important to note that while we have some knowledge about what may be effective treatment, research into the effectiveness of the vast array of available approaches is clearly just beginning.

Behavioral Strategies

Many behavioral techniques have been used as part of the intervention plan for individuals with ASD. Behavioral techniques include specific procedures aimed at teaching new skills and behaviors. These techniques include modeling, prompting, shaping, fading, task analysis, differential reinforcement, precise behavior quantification, and frequent measurement. They are not used in isolation, but in combination. Functional analysis of behavior involving ongoing monitoring of progress and modification of techniques as needed is critical to the success of behavioral interventions. Specific training of parents in techniques to reduce inappropriate behaviors and increase appropriate or adaptive behaviors is usually an essential component of such programs.

Discrete Trial Training

Traditional programs that follow Lovaas's discrete trial training (DTT) approach to behavior therapy are very intensive (from 20–40 hours per week) and involve one-on-one specific response training.[28] This is a highly structured training method that is frequently recommended. Skills are taught in distraction-free environments through repeated, structured presentations. The DTT format consists of (1) adult directions, input, and prompting, (2) child responding, (3) adult feedback [reinforcement] relative to that response, and (4) some method of tracking progress toward previously designated goals and objectives. In general, discrete trials are a set of acts that include a stimulus or antecedent, a behavior, and a consequence.

While the DTT approach is one of the most empirically validated interventions available, professionals urge caution in adopting this technique at the exclusion of all others, especially for extended periods of time. Unless specific techniques are used to train for generalization, skills demonstrated in the training context may not be demonstrated in different environments. Lovaas's 1987 claim[29] that DTT could lead children to recover from ASD sparked considerable controversy as follow-up studies have not fully supported this conclusion. Therefore, in an effort to improve the generalization of skills from teaching settings to daily use in the real world, traditional behavioral techniques are being modified to permit instruction in more natural environments such as the classroom or wherever social and communication behaviors typically occur.

Another controversy surrounds the number of hours of DTT recommended for children with ASD. While traditional DTT recommends 40 hours a week, others find equal effectiveness with 15 or more hours a week.[3] Another controversy addresses the significant costs involved in implementing discrete trial training. Costs vary depending on the location, the number and training of the interventions, the number of hours and duration of the interventions. Long-term studies are definitely needed to understand if such costs will result in significant savings over an individual's lifetime if individuals can learn to function independently. In the mean time, programs devoted to DTT must continuously find and train individuals to administer the intervention, plan carefully to coordinate and supervise these individuals, disrupt family functioning, and require expensive community resources to facilitate this approach.

Applied Behavior Analysis

The bulk of ASD intervention research has been conducted from the perspective of applied behavior analysis (ABA).[26] ABA procedures can be used to increase desired behaviors, decrease inappropriate behaviors, and teach new behaviors to individuals of all levels of functioning. Rather than being tied to specific procedures, ABA tends to include any method that changes behavior in systematic and measurable ways.

Initially, ABA procedures were reactive, focusing on consequences of behaviors after they occurred. There is now increasing emphasis on intervention procedures that focus on what to do before problem behaviors occur. ABA prevention strategies focus on antecedent conditions in the individual or the environment that set the stage for or trigger problem behaviors. Preventative interventions that involve changing schedules, modifying curricula, rearranging the physical environment or the social grouping have been shown to decrease the likelihood of inappropriate behaviors.[30]

Even though the focus is on prevention of problem behaviors, ABA generally takes the perspective that analysis of inappropriate behavior should consider two environmental features and one behavior or set of behaviors that have a temporal relationship. Functional analysis that follows the A-B-C model first considers the "A," antecedents (events or internal conditions) that occur before the individual exhibits "B," behavior. "C," consequences, are the events that follow the behavior that will increase or decrease the likelihood that the behavior will be repeated. For example, (A) the teacher tells the child it is time to sit in a circle when the child is hungry. The child runs to the other side of the room (B). The teacher laughingly chases after the child (C). In this situation, a functional analysis might hypothesize that the child enjoys the attention and activity involved in being chased and will repeat the behavior next time he is asked to join the circle. Or, the functional analysis reviews that the child did not eat his snack and may be hungry. Therefore, if (1) either circle time is changed, (2) eating of snack is more closely supervised, or (3) the child receives a firm "No" instead of being chased, there is a definite possibility that the inappropriate behavior might cease.

Experts do agree that behavioral approaches have the potential to produce positive outcomes and can be effective in teaching communication and social skills. However, there is no empirical evidence that behavioral approaches should be used to the exclusion of all other methods. Therefore, it is generally recommended that principles of ABA and behavioral intervention strategies be included as an important element in any intervention program.[31]

Naturalistic Behavioral Strategies

Naturalistic behavioral strategies are forms of DTT based on each individual's interests and motives. Two examples of naturalistic strategies are incidental teaching and pivotal response training. Incidental teaching consists of a chain of prespecified child-tutor interactions. These interactions involve materials preferred by the child and include prompting and shaping techniques within natural settings involving child-initiated interactions. Research has demonstrated the effectiveness of incidental teaching in the development of communication skills and interaction with peers.[32] Although the strategy was designed primarily for young children, it is being used successfully with a variety of individuals. This approach is also cost-effective and requires no specialized materials.

Pivotal response training (PRT) was designed to facilitate the inclusion of children with ASD into natural environments. It focuses on change in certain pivotal areas such as responsiveness to multiple cues, motivation, self-management, and initiation.[33] PRT uses the principles of ABA excluding negative interactions and

reducing dependence on artificial prompts. Research supports the effectiveness of PRT showing that it increases motivation, improves play skills, and leads to improvements in language skills.[3] It is one of the more family-friendly approaches to intervention. There are a number of advantages to this approach as it considers individual motivation and promotes inclusion rather than one-on-one training.

Structured Teaching Strategies

The most well-known model of structured intervention program is Treatment and Education of Autistic and Related Communication Handicapped Children (TEACCH), headquartered at the University of North Carolina.[34] TEACCH is built on the principle of modifying the environment to accommodate the needs of individuals with ASD. Four main components are the focus of this approach: physical organization, visual schedules, work systems, and task organization. Physical organization refers to the layout of the area for teaching. Clear and specific boundaries are marked by visual information to direct children's activities in a predictable manner. Irrelevant visual and auditory stimuli are blocked. Visual schedules tell the children what activities are to take place and in what sequence. Their anxiety is lessened by being able to predict what will come next. These schedules are especially helpful in assisting individuals with ASD who often have deficits in attention and memory and time and organization. Schedules are individualized for each individual based on their need for concrete (objects) or abstract (drawings) representation. They may represent either short or long periods of time.

Work systems and task organization determine what work students will do independently. These systems tell students what activities are to be completed in their independent work areas. The purpose of the work systems is to visually specify what and how much work is to be completed to fulfill the obligations of the work session. Finally, task organization presents students with information on what needs to be done within a task. This approach emphasizes using individuals' relative strengths in the areas of visual processing, visual-spatial skills, and sensory-motor processing to overcome deficits in the areas of auditory processing, verbal expression, attention, organization, and generalization of skills.

Research on this structured teaching method has generally been promising, although few recent peer-reviewed studies exist. Parents and teachers tend to be very enthusiastic about this model, and school districts have been supporting the costs of training that can be substantial if interested individuals must travel to North Carolina to be trained. The trainer of trainers model has been utilized to increase the numbers of TEACCH programs throughout the country.

In some areas, parents are being trained in this model as well, and there is dated research to suggest the efficacy of this approach.[35]

Augmentative Communication

One of the most widely used augmentative communication programs is the Picture Exchange Communication System (PECS). It was designed for individuals with ASD and other disabilities who lack expressive language skills.[36] As children with ASD often have difficulty pointing using gestures, they can benefit from using gestures to make choices from an array of objects or visual symbols. PECS teaches individuals how to exchange symbols as a means of communication. It systematically uses behavioral steps to teach individuals how to initiate communicative requests by approaching the communication partner and exchanging a symbol for a desired object or action.

Thus, individuals are assisted in the development of functional communication as a social means of getting their needs met. PECS was not designed with speech as the ultimate goal. Its major benefit is that it increases the rate of spontaneous communicative interactions. Once individuals initiate exchanges 80 percent of the time, professionals are encouraged to begin introducing a pointing system or institute the use of a voice output communication device. It is encouraging to note that despite severe limitations in auditory processing and in oral (spoken) language, some children with autism can learn to use pictures and print in meaningful ways, and some become good readers.

To date, few studies have been published in peer-reviewed journals to demonstrate the efficacy of PECS. However, it is widely used with young children and anecdotally appears to be a promising approach. Hopefully, those who use this approach will become more involved in documenting the progress of their students and publishing their findings.

Relationship-Based Intervention

Though not yet substantiated by the scientific community, the Developmental, Individual-difference, Relationship-based (DIR) model (floor time) originated by Greenspan[36] is gaining in popularity. The basis of this approach is an intervention known as floor time. Greenspan's developmental theory guides the four primary goals associated with the child-directed play experience. These include: "(1) encouraging attention and intimacy, (2) two-way communication, (3) encouraging the expression and use of feelings and ideas, and (4) logical thought" (p. 125).[37]

Floor time is designed for use with young children. It is based on the premise that critical missed developmental milestones may be acquired through intensive

child-directed play and positive interactions with caring adults. In contrast to other approaches, it addresses emotional development in a non-threatening approach. It focuses on the whole child and integrates across areas of development within 20-minute sessions. During these session, the caregiver or play partner take an active role in supporting spontaneous and fun activities directed by the child's interests and actions. It is crucial that the adult does not try to teach a particular skill at this time as the child is to be the leader in the activity.

The following five steps are involved in the floor time process: (1) the adult observes the child playing in order to determine how best to approach the child, (2) the adult approaches the child and joins the activity while trying to match the child's emotional tenor and interests, a circle of communication is opened, (3) the adult follows the child's lead as the child directs the interaction, (4) the adult expands on the child's play theme without being intrusive, and (5) the circle of communication is closed when the child expands on the adult's input and a new circle is begun.

Floor time is a popular and most appealing approach as it provides an opportunity for pleasant adult-child interactions and builds on activities natural to all children. However, the effectiveness of this approach has not been substantially documented. Given the potential of this approach for helping parents to engage their child in happier, more relaxed ways while fostering their relationships, it is hoped that researchers will conduct the studies needed to promote such a positive approach to intervention.

Transactional, Family-Centered Intervention

Prioritizing social communication, emotional regulation, and transactional support (SCERTS), the SCERTS model is new to the array of available educational intervention options.[38] This model is a much welcomed synthesis of developmental, relationship-based, and skill-based approaches to intervention. It has a theoretical and empirical base that reflects current and emerging recommended practices noted in the literature as discussed above. Goals include the enhancement of joint attention, symbol use, and self-regulation, while providing visual, interpersonal, professional, and family support. Individualized educational intervention is based on an understanding of each individual's strengths and weaknesses as guided by developmental research. Intervention strategies are derived from evidenced-based practice of contemporary behavioral and developmental approaches. This more integrated, comprehensive approach supports communication and socioemotional development in everyday activities and routines. Although the SCERTS model is built on evidence-based practices, effectiveness of

the total model will be determined once the program is disseminated and developmental progress of participants is determined.

WHERE ARE WE NOW?

The increase of children and youth with ASDs who need and receive educational and medical services is well-documented. Currently, experts cannot agree on why there has been a substantial increase in numbers of individuals with autism or related disorders being served by our public service agencies. However, they can agree that we are experiencing both a human and an economic crisis:

- A human crisis when one considers the toll on families and the individuals, themselves.
- An economic crisis when we consider the costs to society in terms of lifelong public services, impact on families, recruitment and training of practitioners, lawsuits resulting from lack of knowledge about what interventions are the most effective, and lack of individual human productivity. Looking at education alone, the General Accounting Office found that during 1999–2000, the cost to educate a child with autism was $18,790, while it cost only $6,556 to educate a typical child.[39]

To diminish or minimize human devastation, it is urgent that funding be provided for the essential research necessary to understand the causes of this devastating phenomenon. By understanding the causes, we might begin to prevent future generations from facing these crises. Finally, it is absolutely critical that we involve the scientific community in longitudinal investigations to determine what medical treatments and educational interventions will most benefit those who are already afflicted. By increasing public knowledge about ASD, it is hoped that society will no longer tolerate the confusion and ignorance related to prevention and treatment of ASD that currently exists.

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Frequently Asked Questions about Attention Deficit/Hyperactivity Disorder

Carolyn Pender and Bradley Smith

Attention-deficit/hyperactivity disorder (AD/HD) is a common, chronic, impairing disorder characterized by developmentally inappropriate levels of inattention and/or hyperactivity/impulsivity.[1] Despite the fact that it is one of the most heavily researched disorders in child psychiatry, there remains a great deal of controversy and misunderstanding regarding this disorder.[2] This chapter takes a unique approach in that it is written to accommodate individuals who are impatient, have short attention spans, or both. The brief question and answer format will allow the reader to avoid getting bogged down in detail. Instead, the interested reader can skip to the questions of greatest interest or personal relevance, gain information within a brief period of time, and have access to a chapter that, as a whole, leads to a comprehensive and contemporary understanding of the major issues related to AD/HD.

INTRODUCTION TO ATTENTION DEFICIT/ HYPERACTIVITY DISORDER

What Is AD/HD?

The answer to this question is complicated, so please be patient with our detailed answer. As the slash between the AD and HD in AD/HD implies, the set of symptoms defining AD/HD are best described as two disorders. One type of AD/HD is related to problems with regulating attention. The other type of AD/HD is associated with problems with impulsivity and hyperactivity. Not all

individuals with AD/HD show the same symptoms, nor does each person experience symptoms of AD/HD to the same level of severity. Moreover, AD/HD related impairment can be inconsistent and unstable, with tremendous variability across and within settings (e.g., good in math, but not science class on Tuesday, and visa versa on Wednesday). Furthermore, symptoms may vary across the life span. In general, variability should be considered one of the hallmarks of AD/HD.

Before continuing, we should note that some people do not think that AD/HD is a "real" disorder. Like all mental health disorders, AD/HD is socially defined in the sense that there is no single medical test to define the disorder. Individuals with AD/HD or other mental health disorders such as depression or schizophrenia show symptoms that are extreme relative to other individuals in society. This concept is illustrated by a joke that depicts a hypothetical conversation between a mental patient and a psychiatrist. The joke starts with the patient saying, "Doctor, I am not crazy, all of the rest of the world is insane." To that the psychiatrist responds, "You may be correct, but we are the majority."

Unfortunately, because there is no simple, objective test for AD/HD, some have questioned the validity of AD/HD. To deal with the multitude of questions about AD/HD, the National Institutes of Health held a consensus forming conference in 1998.[3] One of the firm conclusions was that that AD/HD is a real disorder that can be reliably diagnosed and responds to some types of treatment. Based on this consensus forming conference and an overwhelming body of scientific evidence, saying that AD/HD is fake is the intellectual equivalent of saying the world is flat.

There is growing evidence that AD/HD is biologically based, and someday there may be an objective medical test for AD/HD.[2] This should not be confused with the notion that the only appropriate treatments for AD/HD are biological, such as the stimulant drug methylphenidate. If AD/HD is biologically based, then it is important to understand interactions between biology and environment. The complexity of the biology/environment interaction helps to explain why AD/HD is so variable across individuals, ages, and settings. Given the right fit with one's environment (e.g., the right job, spouse, or school), or with treatments that help one fit into the environment (e.g., stimulant medication and behavior contracts), people with AD/HD can lead very productive lives. Moreover, some have even argued the AD/HD can be a gift in some circumstances.[4] In most cases, however, AD/HD can be a real challenge for the individuals with the disorder as well as those who care for them (e.g., parents, teachers, and spouses).

How Is AD/HD Diagnosed?

A state-of-the-art diagnosis of AD/HD should be made based on the following five critical considerations: (1) there are developmentally inappropriate

levels of AD/HD symptoms, (2) AD/HD symptoms are reported by multiple persons, (3) the AD/HD symptoms are responsible for clinically significant impairment in multiple settings, (4) the symptoms are chronic and have been present since an early age, and (5) other causes for clinically significant impairment have been ruled out.

A truly comprehensive AD/HD evaluation includes a thorough diagnostic interview, a medical examination, collection of information from independent sources such as parents, family members, or spouses, *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition (*DSM–IV*)[1] symptom checklists completed by two different sources, standardized AD/HD behavior rating scales, and other types of psychometric testing selected by the clinician depending on the individual's presenting symptoms (e.g., screening for depression or anxiety). When appropriate, such as when there is conflicting information across sources, individuals should also be observed in various settings to discover sources of disagreement and rule out other common causes of inattention and hyperactivity/impulsivity. These include an inability to complete assigned work in school or problems in the workplace due to a lack of basic skills, an overly distracting or chaotic environment, and the presence of symptoms visible only in selected environments or situations (e.g., a so-called bad fit in only one classroom).

Unfortunately, most individuals do not undergo state-of-the-art evaluations for AD/HD.[2,12] Consequently, AD/HD is frequently misdiagnosed, and sloppy assessment has been partially responsible for adding to the controversial nature of this disorder. A minimally acceptable diagnosis of AD/HD should be based on the following information: (1) a count of clinically significant symptoms of AD/HD that is above an age-appropriate cutoff and/or ratings of AD/HD symptoms that show extreme levels compared to same age peers (e.g., in the 95th percentile or higher), (2) has input from multiple persons, (3) documents significant impairment in multiple settings, (4) shows that the symptoms have been present for a very long time, preferably since early childhood (e.g., before seven years of age), and (5) reasonably rules out competing explanations for the impairment, including medical and psychiatric conditions.[5] The issues of symptoms and multiple informants are discussed in greater detail below.

The most widely used sets of symptoms to describe AD/HD are found in the *DSM–IV*.[1] The *DSM* is widely regarded as the most up-to-date diagnostic manual; however, updates in the *DSM* can lead to changes and confusion regarding the list of symptoms or diagnostic criteria for AD/HD (for example, the reader is encouraged to refer to the following section on ADD versus AD/HD). For present purposes, the most current *DSM* criteria (i.e., *DSM–IV*) will be described here. Since children and adults typically show different symptoms of AD/HD (the reader is encouraged to read the section further on in this chapter that

addresses the differences between child and adult displays of AD/HD symptoms), it is likely that subsequent versions of the *DSM* (e.g., *DSM–V*, which is currently being developed) may introduce new diagnostic considerations for adolescents and adults.

According to the *DSM–IV*,[1] children must display at least six symptoms of either inattentive behavior and/or hyperactive/impulsive behavior in order to meet AD/HD diagnostic criteria. The symptoms must be considered developmentally inappropriate, must be present in a minimum of two different settings (e.g., home and school), must have been present for at least six months, and must result in significant impairment in major life activities (e.g., school, social relationships, hobbies, home life). Also, symptoms must not be better explained by other disorders such as psychosis, bipolar disorder, pervasive developmental disorders, or mental retardation.

The *DSM–IV* inattention symptoms are as follows: (1) fails to give close attention to details, (2) shows difficulty sustaining attention, (3) does not seem to listen to when spoken to directly, (4) does not follow through on instructions, (5) has difficulty organizing tasks or activities, (6) avoids tasks that require sustained mental effort, (7) often loses things necessary for completion of tasks, (8) is easily distracted, and (9) is forgetful in daily activities.

The *DSM–IV* hyperactive/impulsive symptoms include: (1) fidgets with hands or feet or squirms in seat, (2) leaves seat in situations where it is considered inappropriate to do so, (3) runs about or climbs excessively, (4) has difficulty playing quietly, (5) is often "on the go" or acts as though "driven by a motor," (6) talks excessively, (7) blurts out answers before questions are completed, (8) has difficulty awaiting their turn, and (9) interrupts or intrudes on others.

After reading these symptoms, it is common to say something like "that sounds like me" or "that sounds like my child." This is because many people exhibit some of these symptoms, some of the time. To have AD/HD, however, most of these symptoms need to present most of the time, plus other criteria need to be met. Remember, the symptoms are only one-fifth of a decent assessment for AH/HD.[5]

Requesting multiple persons to document AD/HD symptoms and related-impairment is of critical importance in making an accurate AD/HD diagnosis and in developing the best possible treatment plan for the presenting symptoms. For example, individuals with AD/HD are known to have limited insight into their AD/HD symptoms. Consequently, if all data for an assessment of AD/HD is collected from only the person with AD/HD, then that assessment is likely to result in a false negative (i.e., saying the person does not have AD/HD when the person really does have AD/HD).[2] For example, this tendency was well-illustrated in a study of young adults with

well-documented childhood histories of AD/HD.[6] When researchers asked individuals about their problems in functioning resulting from AD/HD, the diagnosis rate was approximately 5 percent of the sample. In contrast, when data from parents, spouses, or roommates were considered, the diagnosis rate was estimated to be about 65 percent.

In addition to being cautious about under-reporting of symptoms by someone with AD/HD, it is also critical to pay careful consideration to the functioning of other informants. For example, when a stressed or depressed parent provides all of the information for an assessment, it may be tainted by their biased perspective (e.g., bad mood or hopelessness). In such cases, rating data from another caregiver such as another person living in the home, as well as the child's teachers, is necessary to obtain a more accurate understanding of the child's current functioning.

What Is the Difference between ADD and AD/HD?

The labels attention-deficit disorder (ADD) and AD/HD are a source of confusion, and create a considerable quandary. On the one hand, the labels correctly convey the notion that AD/HD is at least two different types of conditions. On the other hand, the term ADD perpetuates an outdated conceptualization of what we now call AD/HD. To understand this situation, it may be helpful to review the history of the *DSM*.

In the *Diagnostic and Statistical Manual of Mental Disorders*, Second Edition (*DSM–II*),[7] there was a diagnosis called "Hyperkinetic Reaction of Childhood,"[2] however, the most prominent psychiatrists of the time began to theorize that the fundamental problem associated with this condition was inattention. The term ADD first appeared in the *Diagnostic and Statistical Manual of Mental Disorders*, Third Edition (*DSM–III*), published in 1980.[8] The ADD label reflected the *DSM* committee members' opinion that symptoms of inattention were the core of this disorder. The committee also acknowledged the presence of hyperactivity. Hence, the *DSM–III* specified two diagnoses: (1) ADD without hyperactivity (i.e., ADD) and (2) ADD with hyperactivity (ADD-H).

Subsequent research demonstrated that some individuals were hyperactive or impulsive without being inattentive. Hence, when the *DSM–III* was revised in 1987, the *DSM–III–R* introduced the term attention-deficit/hyperactivity disorder. This was a new name for a long-recognized problem (refer to the following section). A major criticism of the term AD/HD was that it was not specific enough, and that it lumped a diverse group of individuals under the same diagnostic label. Furthermore, research was growing to show that inattention and hyperactivity/impulsivity were separate but correlated sets of problems.

When the *DSM* was revised again in 1994,[1] the new *DSM–IV* criteria made clear distinctions between inattention and impulsivity. More specifically, three subtypes were introduced to more accurately describe the condition. These are described in more detail below.

The first *DSM–IV* category is AD/HD predominately inattentive subtype, which is very similar to the now obsolete (i.e., *DSM–III*) ADD without hyperactivity. Individuals diagnosed with this label show signs of poor attention regulation, but not any unusual difficulty with impulsivity or hyperactivity.

The second *DSM–IV* category is AD/HD predominantly hyperactive/impulsive subtype. Individuals with this subtype have problems with impulse or activity regulation, but function reasonably normally with regard to attention. This diagnostic category is one of the unique contributions of the *DSM–IV*, which states for the first time in the history of the *DSM* that some individuals experience problems solely related to hyperactivity/impulsivity.

The final *DSM–IV* category is AD/HD combined subtype, which is highly similar to the outdated (i.e., *DSM–III*) term ADD with hyperactivity. This term refers to individuals who show both difficulties with inattention as well as hyperactivity/impulsivity.

To summarize, using the terms ADD and AD/HD (a) creates confusion, (b) perpetuates old diagnostic criteria that do not fit with contemporary notions of AD/HD, and (c) fails to recognize cases in which problems are primarily due to hyperactivity/impulsivity The best way to avoid confusion is to use the *DSM–IV* terms "AD/HD predominately inattentive subtype", "AD/HD predominately hyperactive/impulsive subtype", or "AD/HD combined subtype".

Is AD/HD Something New?

The answer to this question is a resounding, "No!" and anyone who suggests that the diagnosis of AD/HD is some sort of modern invention is totally misguided. Admittedly, the term "AD/HD" is fairly new, as this disorder was only formally recognized by the APA in the mid-1980s[8]; however, the concept of AD/HD has been discussed by experts working with children for at least 100 years,[2] probably longer. Although AD/HD was almost certainly discussed prior to the first publications appearing on the disorder, the first formal description of what we now call AD/HD was by George Still who gave a series of three lectures to the Royal College of Physicians that were published in 1902. In this series, Dr. Still described these children as lacking moral control, which in the parlance of the times, apparently referred to developmentally high levels of impulsivity. His sample of children showed similar tendencies as children with

AD/HD today. For instance, Dr. Still suggested that males were three times more likely to show evidence of the condition, and that most children showed symptoms by eight years of age.

While Dr. Still made numerous contributions to the early understanding of the disorder we now call AD/HD, the conceptualization of AH/HD has evolved considerably since this time. For example, Still hypothesized that deficits in inhibitory volition, moral control, and sustained attention were casually related to each other and resulted from the same underlying neurological deficiency, supposedly some type of brain damage. Modern scientists and clinicians would not describe AD/HD as a sign of brain damage because years of research have failed to identify any gross neurological deficits. The causes of AD/HD are subtle and complex, and have been with us for a long time.

How Common Is AD/HD?

A good answer to this question is that AD/HD is common enough that we would expect every classroom in the United States to have at least one child with AD/HD (assuming equal distribution of AD/HD across classrooms and a class size of approximately 20 students). More technically, according to the *DSM–IV*,[1] between 3 percent and 5 percent of school aged children meet criteria for AD/HD in the United States. While the 3–5 percent prevalence rate is currently the most commonly cited range, other researchers have suggested rates ranging from as low as 1.6 percent to a high of 16 percent.[9] Reasons for such wide ranges in prevalence of AD/HD among children include different methods used to determine whether the child meets criteria for AD/HD, age and gender of the research sample, varying degree of stringency used in differentiating kids with AD/HD from those without the disorder, and differences in the nature of the population (e.g., urban versus rural samples).

Interestingly, males are three times more likely to receive a diagnosis of AD/HD than females.[2] In clinical samples (e.g., groups of children seen in a research setting), males tend to meet criteria for a diagnosis of AD/HD five–nine times more often than females. While popular media and press often claim this difference in frequency of diagnosis between males and females results from males naturally being more active, hyperactive, and aggressive than most females, researchers have only recently begun to study gender differences in AD/HD.

AD/HD is more common among children than adults, and is more likely to be seen in middle to lower-middle social classes. Further, there is increased diagnosis of AD/HD in population dense areas. To date, there is no evidence that AD/HD prevalence varies by ethnicity after social class and urban/rural lifestyle have been accounted for. As summarized by Barkley,[2] research has

shown that AD/HD exists across the world, with children meeting *DSM–IV* diagnostic criteria in countries such as Germany, Japan, the Netherlands, New Zealand, and Canada, just to name a few.

If You Can Focus on Some Things but Not Others, Can You Still Have AD/HD?

The answer to this question is a resounding "Yes!" This is one of the great paradoxes of AD/HD. In many cases, persons with AD/HD can attend to intrinsically interesting activities (e.g., fishing or videogames) for extended periods of time, but rapidly lose interest in tedious work or school-related activities. Similarly, persons with AD/HD may attend well in novel situations, but rapidly lose interest over time. Thus, it may appear as though the ability to pay attention in some situations and not others is an issue of willpower or motivation. However, AD/HD should not be described as laziness.[5] Rather, AD/HD might be viewed as different levels of attention and/or impulse regulation that are associated with unique sensitivities to reinforcement. Figuring out how to deal with unique levels of inattention and/or impulsivity and related motivational difficulties is one of the greatest challenges of working with individuals with AD/HD.

What Are the Common Disorders That Might Be Confused with AD/HD?

The answer to this question is complicated, and due to the limited space for this chapter, our response is probably incomplete. We will discuss some disorders that are commonly confused with AD/HD, but will not list them all. Generally speaking, the disorders commonly confused with AD/HD fall into three categories. First, there are medical disorders that might be confused with AD/HD but can be ruled out medically, for example hyperthyroidism. Second, there are psychiatric disorders that can be confused with AD/HD that would take precedence over an AD/HD diagnosis, at least until the disorder is properly treated. Examples of these disorders are cases of psychosis or mania. Third, there are disorders that can be confused with AD/HD but can also co-occur with AD/HD. Indeed, Russell Barkley,[2] a leading expert in AD/HD research, has suggested that at least 80 percent of children with AD/HD show evidence of a second disorder, while 60 percent or more children have two or more comorbid disorders. Other estimates suggest a more conservative estimate of 60 percent of children showing evidence of another disorder.[10] Examples of commonly comorbid *DSM–IV* disorders include: oppositional defiant disorder (ODD), conduct disorder (CD), anxiety disorders, major depressive disorder (MDD), and tics and Tourette's syndrome. Each of these disorders will be discussed in more detail below.

ODD is characterized by a pattern of negativistic, hostile, and defiant behavior lasting at least six months with children showing behaviors such as losing their temper, arguing with adults, actively defying or refusing to comply with adult rules, and being angry and resentful.[1] In 40–70 percent of cases, children showed comorbid AD/HD and ODD, with AD/HD symptoms thought to contribute to ODD due to the many daily hassles created by AD/HD. Individuals with ODD only are primarily irritable rather then inattentive or impulsive.

CD is defined by repetitive and persistent patterns of behavior in which the basic rights of others or major age-appropriate societal rules or norms are violated with symptoms lasting for at least the previous six months. Examples of symptom clusters related to CD are (a) aggression to people or animals, (b) destruction of property, (c) deceitfulness or theft, and (d) serious violations of rules or laws.[1] In 20–56 percent of cases, children show comorbid AD/HD and CD. Due to the more serious nature of CD, children showing this comorbidity will often show greater impairment in general functioning as well as poorer long term outcomes. Individuals with CD only are planful and often unremorseful or uncaring about victims, whereas individuals with AD/HD may commit transgressions impulsively or accidentally and later regret their actions.

Anxiety disorders are characterized by excessive anxiety and worry occurring more days than not, for at least six months, and interfere with a number of events or activities such as work and school performance. There are many forms of anxiety and it is beyond the scope of this section to describe them all. Briefly, symptoms of an anxiety disorder that might be confused with AD/HD include restlessness or feeling keyed up or on edge, difficulty concentrating or mind going blank, irritability, muscle tension, and sleep disturbance (including difficulty falling asleep or staying asleep or restless sleep).[1] Between 10–14 percent of children with AD/HD also meet criteria for an anxiety disorder. Some researchers believe that anxiety among children with AD/HD results from poor emotion regulation as opposed to actual fear.[2] Comorbid anxiety is an important diagnostic consideration because children with AD/HD plus anxiety may receive less benefit from treatment with medication than do children with AD/HD who are not anxious.

MDD is characterized by depressed mood or a general loss of interest or pleasure in activities. Some of the symptoms of a major depressive episode that might be confused with AD/HD include impaired concentration, restlessness, overactivity, decreased sleep, and lack of interest in formerly pleasurable activities.[1] Estimates of the overlap between AD/HD and depression vary widely (i.e., 0–45% of children diagnosed with AD/HD meet criteria for MDD); however, it has been suggested that it is typical for one out of four individuals

with AD/HD (25%) meet *DSM–IV* criteria for MDD by age 20. Depression can be a serious, life-threatening condition due to the elevated risk for suicide, and therefore should always be monitored when working with someone with AD/HD.

Tourette's syndrome is typically characterized by spontaneous vocalizations or movement, technically tics which are defined by sudden, rapid, recurrent, and nonrhythmic movements or vocalizations.[1] Recent reports suggest that approximately 7 percent of children with AD/HD have tics or Tourette's syndrome; however, 60 percent of individuals with Tourette's syndrome also have a diagnosis of AD/HD. In some cases, use of stimulant medication in the treatment of AD/HD may exaggerate Tourette's-like symptoms in some children. If this happens, families are encouraged to consult their child's prescribing physician to determine whether a lowering of dosage may serve to decrease the presence of tics. If necessary, doses of stimulants can be lowered, other medications can be tried instead of stimulants, or other medications may be administered in conjunction with stimulants to decrease or eliminate tics.

While mania can co-occur with AD/HD, it is rather infrequent in comparison to other disorders. For example, recent research findings suggest that between 6 and 10 percent of children with AD/HD also experience mania. Mania is characterized by a distinct period of abnormally and persistently elevated or irritable mood lasting at least a week. Mania also involves the individual showing inflated self-esteem, a decreased need for sleep, being more talkative than usual, having flights of ideas or high levels of distractibility, and showing increased goal-directed activity (e.g., working on "projects," hypersexuality, and other intrinsically motivated pursuits).[1] When treating a child showing signs of mania and AD/HD, it is of fundamental importance to manage the manic symptoms and possible bipolar disorder (sometimes called manic-depression) before addressing the AD/HD symptoms. In most cases, effective treatment involves polypharmaceutical management and intensive behavior therapy. Children displaying manic symptoms and AD/HD are at an increased risk for substance abuse and suicide as adolescents. These children also tend to show psychotic-like disturbances in thought, higher irritability, increased aggressiveness, and more violent behavior. These two conditions are more likely to co-occur in families where there is a history of bipolar disorder.

Similar to mania, psychosis may also co-occur with AD/HD, but the prevalence rate is considerably lower than that of other disorders. Psychosis involves the presence of one or more of the following symptoms: delusions, hallucinations, disorganized speech, and grossly disorganized behavior (e.g., difficulty with gross and fine motor coordination and movement).[1] The first

generation of drugs used to treat psychosis, called typical antipsychotics, work in the opposite manner of stimulant drugs to treat AD/HD and often make attention symptoms worse. The new generation of anti-psychotic drugs, sometimes call atypical antipsychotics, treat psychosis without causing a lot of attention-related side effects. Thus, these new medicines are a promising option for individuals with a history of AD/HD. Regardless of the choice of medication, the combination of family or other highly structured social support, plus medication, is clearly the best treatment for schizophrenia.

Are Accommodations Appropriate for Individuals with AD/HD?

The appropriate accommodations are those that work, are fair and manageable, and do not inadvertently reinforce the problem behavior.[2] Furthermore, accommodations should be tailored to the individual, tested for effectiveness, and must be sustainable within the setting for extended periods of time. For instance, a student with AD/HD may find massed practice of arithmetic problems to be aversive and difficult to complete. If the student can demonstrate mastery of the arithmetic concept in a few problems, and do them with reasonable accuracy and fluency, there is no need for massed practice, especially if failing to complete lengthy practice assignments is the major reason for their failure to earn a good grade in class. In such a situation, an appropriate accommodation may be to give fewer arithmetic problems. However, the accommodation should be a two-way street. For example, if the student performs poorly on the reduced set of problems, the expectation should be something like completing extra arithmetic problems until they demonstrate adequate levels of accuracy and fluency. However, it cannot be stressed enough that simply doing more of the same (i.e., assigning more arithmetic problems) is not considered an appropriate accommodation for children with AD/HD. Extra practice of the skill may involve the student staying after school or arriving early before the school day begins to do the extra work under different conditions than the regular classroom.

In the past couple of years, a wide range of accommodations have been suggested by various AD/HD specialists. It is important to keep in mind that not all accommodations are created equal, and that some approaches are considered to be better than others. Since it is not possible to cover all forms of accommodations that are currently available in the treatment of this disorder, basic classroom considerations and other general academic accommodations will be covered in greatest detail since AD/HD-related accommodations are most commonly used with school-aged children.

Some accommodations are very simple. For example, in order to benefit fully from classroom instruction, children with AD/HD should be seated in close proximity of the teacher using a traditional desk configuration. Seating a child with AD/HD in the rear of the classroom with their back facing the teacher will drastically reduce participation in class and may impede skill mastery. Indeed, understimulating children with AD/HD can sometimes make problems worse. Excluding children with AD/HD is counterproductive and, in most cases, illegal.

With regards to class assignments, students with AD/HD often benefit from having tasks broken down into smaller steps. Instead of allowing the child more time to complete the whole assignment, breaking down the task into smaller tasks using the same total amount of time often helps promote task completion by keeping the student on task. Given that many children with AD/HD have trouble sustaining their attention over long periods of time, accommodations such as longer test taking time are potentially counterproductive. Moreover, giving more time to complete assignments puts increased demands on teachers or other school professionals, and can be more effectively dealt with by seating the student in the front of the room and providing brief and frequent checks on their progress toward clearly specified intermediate goals for the test or assignment.

Some accommodations deal with student's organizational skills or problems such as losing assignments. A related accommodation might be giving students with AD/HD weekly assignments rather than assigning homework on a daily basis. Decreasing the number of times students are expected to transport materials between home and school may be counterproductive. In some cases this accommodation may result in decreased loss of assignments, decreased chance of the student simply forgetting to turn in completed work, and increased likelihood of actual work completion. Unfortunately, giving weekly assignments only avoids dealing the problems related to organization and forgetfulness. Moreover, once a week assignments up the ante, so to speak, regarding forgetting (i.e., losing a weeks worth of work instead of one day). Therefore, we think it is better to work with the student, parents, and other involved individuals to develop better skills at transporting and tracking assignments on a daily basis.

To help children be as organized as possible, parents may want to invest in three ring binders or folders and to adopt a specific organization system facilitated by dividers or folders for each subject or for certain activities. For example, you might make divider sections or folders for each of the following tasks: notes, assignment log, homework I am working on, homework that is done, homework to be handed in, and returned assignments. Creating a specific section for all of the student's work often helps decrease messy lockers,

disorganized school bags and bedrooms, and helps assure that the student does not forget to complete assignments or hand them in when they are due. Most students with AD/HD will greatly benefit from having organization checked and rewarded on a daily basis, including older students (e.g., in high school or college).

A low cost accommodation that can be effective with all students, but especially those with AD/HD, is to consider scheduling the most difficult subjects early in the morning as opposed to later in the day when fatigue may increase AD/HD symptoms. Likewise, medication can be adjusted so that the peak effects are timed to occur when medication is most needed. Teachers should also try and mix together less desirable activities with highly desirable activities to help sustain interest and encourage continued participation. Providing students with a daily schedule also helps to build a routine and informs students of what is required and expected of them at different times throughout the day each day of the week. Establishing a regular schedule early in the academic year can help boost work productivity and decrease behavior problems in the classroom.

General classroom instruction should be stimulating and rewarding for students. Therefore, teachers should be animated and use strategies to assure participation from all students. This may be achieved by having the teacher walk around the class while teaching and tap students' shoulders for responses to encourage them to pay attention and follow the lesson more closely. Teachers may also use computer programs to allow students with AD/HD to practice basic and applied skills. Books on tape and videos or DVDs are other tools that often result in greater acquisition of knowledge. Research has also shown that having students with AD/HD take notes during lessons results in higher test performance then simply having them sit and listen.[11] When reading, students with AD/HD should be periodically asked comprehension questions to assure they are processing the material they are reading. Note taking and writing summaries can often be very helpful. Such strategies will probably help the whole class, but may benefit students with AD/HD the most.

Since students with AD/HD often show difficulty with impulsivity, they should be discouraged from providing impulsive responses when answering the teacher. However, this creates a conflict between punishing impulsive responses and potentially inadvertently punishing participation. A good solution for this conflict is to have teachers ask students to write down their response on a write-on, wipe-off board or on a piece of paper before they have the chance to blurt out their response. The teachers can then check and reinforce participation without having students with AD/HD blurting out answers and aggravating other students.

To increase students' motivation to learn in the classroom or complete chores at home, teachers and parents may want to consider implementing a token reward system that is positively based and allows students to earn various privileges. Opportunity for reward should be frequent so that students with AD/HD do not lose motivation and revert to negative behavior. For information on how to implement a positive point system, readers are encouraged to consult Smith, Barkley, and Shapiro.[12] Another option for teachers and parents to manage behavior is to use a daily report card (DRC). This system encourages communication between the teacher and parent of a child with AD/HD by having the teacher rate the child's behavior in various areas on a five point scale each day. Examples of behaviors to be rated may include: participation, completed class assignments, followed class rules, followed teacher directions, and got along well with peers. The DRC may be used in conjunction with an at home plan which gives the child the opportunity to earn rewards from their parents for good behavior. By maintaining communication throughout the academic year, parents are less likely to receive any surprising news regarding their child's academic performance and behavior at report card time. Thus, a DRC can be low-cost and very effective accommodation for students with AD/HD.

Teachers should also pay attention to the frequency they praise their students and show appreciation. Unfortunately, many students with AD/HD have the majority of their interactions with teachers because they broke a rule or otherwise behaved inappropriately. This creates a situation such that attention from the teacher may actually inadvertently reinforce bad behavior. Whenever possible, teachers and parents should give much more attention to good behavior then bad behavior. Increasing the student's opportunities to earn positive praise from their teacher often results in a decrease in undesirable behavior. Indeed, the best way to decrease the frequency of an undesired behavior is to increase the frequency of a positive behavior that is incompatible with the negative behavior. For example, a student who bothers other children when they are supposed to be working can have this problem corrected by reinforcing the student for doing work at their seat. This is not really an accommodation, it is simply good behavior management. Hence, some so-called accommodations for students with AD/HD are simply good skills applied more often with this demanding population.

Most qualified school psychologists should be able to help with accommodations and behavioral interventions. If not, parents might pursue a behaviorally oriented psychologist for help. Behavioral methods are very powerful and should be a fundamental part of working with school-aged children with AD/HD. Remember, if we can get whales to jump through burning hoops, we can get kids with AD/HD to do what they are asked to do at school.

AD/HD ACROSS THE LIFE SPAN

Do Children Outgrow AD/HD?

Generally speaking, children diagnosed with AD/HD do not "outgrow" the symptoms of the disorder. Recently, scientists have discovered that AD/HD symptoms persist into adulthood in approximately 40–80 percent of cases.[2] Moreover, those who met criteria for AD/HD as children but no longer meet criteria as adults are typically much more impaired than their peers who were never diagnosed with AD/HD. Symptoms may be less obvious as individuals mature. This decline in obvious symptoms might explain why some experts used to think that children outgrew AD/HD. Instead, there is now a broad consensus that AD/HD is a chronic disorder that persists across the life span for the majority of individuals.[2,5,10,12,13]

A typical course of development would begin with a child showing excessively active, noncompliant, and difficult behavior as a toddler, which often results in delays in academic readiness skills. Throughout elementary school, difficult and mischievous behavior tends to continue, with parents experiencing increasing difficulty caring for the child. Throughout the teenage years, parents often report high levels of familial conflict and stress. Disagreements surrounding issues such as substance use, inappropriate conduct, academic difficulties, and reckless and dangerous driving are common among adolescents with AD/HD. As such, parents of teenagers with AD/HD often experience greater stress than parents of non-AD/HD teens. Recent research studies have suggested that teens with AD/HD are more likely to experience car accidents, receive more speeding tickets, are less likely to graduate from high school, and are at greater risk for teenage pregnancy.[2]

While the current body of knowledge of AD/HD among adults remains sparse, a couple of well-conducted longitudinal studies have found continuing problems for AD/HD into young adulthood. Specifically, the disorder has been linked to interpersonal problems, poor academic achievement, problems with traffic violations and accidents, and vocational difficulties.[2] Furthermore, AD/HD has been associated with an increased number of criminal convictions, antisocial behavior, and substance use problems. In many of these cases, comorbid conduct disorder develops into antisocial personality disorder, so that AD/HD alone does not account for severe antisocial or substance abuse problems. However, AD/HD is uniquely associated with risk for smoking, and thus persons with AD/HD may suffer the health consequences of smoking at a higher rate than the general population.[14]

A recent study of college students completed by the authors of this chapter found that college students showing elevated symptoms of inattention displayed

different deficits in functioning than students with high levels of impulsivity.[13] Specifically, compared to those with lower levels of inattention symptoms, first year college students with high levels of inattention reported more difficulties with social relationships, more conduct problems, a greater number of alcohol-related problems, and more depression. In contrast, compared to those with lower levels of impulsivity, students who were impulsive showed greater deficits in academic performance, increased difficulties with social relationships, and a greater number of hours spent consuming alcohol. These findings support the idea that AD/HD is a set of disorders with different clusters of problems.

Are There Differences in Symptoms between Children and Adults with AD/HD?

The answer to this question is most definitely yes! Indeed, this is a major limitation of the current *DSM–IV* diagnostic criteria. The system used to diagnose AD/HD was developed for use with children, but is currently the same for children and adults. The major limitations of this system are related to (a) the developmental appropriateness of the list of symptoms, and (b) the requirement that AD/HD-related problems need to be documented prior to the age of seven.[2] The list of symptoms for inattention might work with both children and adults, but the symptoms for hyperactivity/impulsivity are problematic for use across the life span. For instance, most 30 year olds do not have problems with remaining seated or running and climbing excessively. Many adults with AD/HD report feeling restless, but the *DSM* does not ask for subjective feelings of hyperactivity even though psychiatrists ask about sub-jective feelings when assessing other disorders such as MDD. Due to the vast difference in symptom display between children and adults, some experts have suggested that a new set of symptoms should be developed and tested with adults. In fact, there are some new rating scales for adults to help diagnose AD/HD that might be more developmentally appropriate than using the usual *DSM–IV* criteria.

One way to cope with limitations of the *DSM–IV* system when working with older individuals is to "relax" the cutoffs or symptom criteria. As mentioned earlier, the *DSM–IV* currently requires an individual to display six out of nine possible symptoms in the broad areas of inattention and/or hyperactivity/impulsivity. However, many of the symptoms associated with AD/HD apply more to younger children than to adults (e.g., acts as though driven by a motor, climbs on things when it is inappropriate to do so). Thus, it is arguably eas-ier for a child to receive a diagnosis of AD/HD than an adult. Accordingly, some have suggested that to diagnose an adult with AD/HD predomi-

nately inattentive subtype, you should only require five symptoms instead of six. Likewise, and perhaps more radically, some have suggested that a diagnosis of AD/HD predominately hyperactive/impulsive subtype should require only four symptoms from the *DSM–IV* list of nine. This recommendation is based, in part, on research showing that at five symptoms of inattention and four symptoms of hyperactivity/impulsivity are cutoffs at about the 95th percentile for adults.[2] Thus, the lower cutoffs would maintain the base rate of AD/HD at about 5 percent for both children and adults.

Another problem with the *DSM–IV* criteria for diagnosing AD/HD is the requirement that the age of onset must be established prior to seven years of age. When an older person presents for an evaluation for AD/HD, it is often very difficult to confidently establish that there were problems with AD/HD prior to age seven. Retrospective recall is extremely problematic and is likely to be strongly biased by whether or not the person thinks they have AD/HD. While comments in elementary school report cards can sometimes be used to infer difficulties related to AD/HD, it is very hard to meet the early onset criteria for *DSM–IV* in the absence of such data.

When early onset cannot be established objectively, or if the client just barely misses the cutoff for *DSM–IV* diagnosis of AD/HD, it is acceptable to diagnose them with AD/HD-NOS. Such a diagnosis carries the message that the clinician thinks the client has AD/HD, but the client does not strictly meet the *DSM–IV* criteria for AD/HD. Usually such a diagnosis is accompanied by an explanation why the NOS designation was used and the diagnosis should be considered just as valid as any other diagnosis of AD/HD.

How Do Problems Related To AD/HD Change across the Life Span?

Problems related to AD/HD change quite a bit across the life span, and unfortunately often grow worse as deficits accumulate and consequences for mistakes or misbehaviors become more serious. Although there are many anecdotes to the contrary, infants and toddlers who will eventually be diagnosed with AD/HD are not easily distinguished from their non-AD/HD peers because children of this age naturally exhibit such (and developmentally appropriate) high levels of inattention and impulsivity that AD/HD symptoms are often not noticeable.

Parents who argue that their child showed signs of AD/HD as an infant and toddler are probably heavily influenced by the bias of their current knowledge about the child. Most assuredly, some children are more difficult to manage than others, but the early emergence of management problems could

be related to comorbid conditions such as ODD as much as to AD/HD. Thus, it is hard to determine if early problems are due to AD/HD or co-occurring conditions.

There is growing evidence that AD/HD can be reliably and validly diagnosed among preschoolers.[2] At this age, impulsive children run the risk of being rejected by peers due to inappropriate interpersonal behavior such as aggression and rule breaking (e.g., failing to wait their turn). Inattentive children who get lost in their own world may be neglected by their peers, but are not usually actively rejected. Mealtimes and chores may be more difficult with preschoolers with AD/HD. Parents may notice that these children become bored easily and need a lot more adult help than most kids to keep them occupied and safe or to complete tasks, such as getting dressed or cleaning up a room. Those who attend day care may present challenges to teachers, especially during quiet times and during group activities when peer relationship problems may surface. In some situations, behavior may be so severe that the child may even get expelled from a series of child care settings.

When children with AD/HD enter elementary school, they enter a nearly perfect environment for detecting AD/HD. These hyperactive and/or inattentive students are asked to sit still and pay attention for extended periods of time, which can be highly problematic for this group. Even "normal" students complain that school is boring. Imagine how a child with AD/HD feels?

The peak age for noticing AD/HD symptoms is during first grade, with the first referrals for help peaking around second or third grade. Presenting problems related to AD/HD at this age include academic difficulties, discipline problems at school, discipline problems at home, and conflict with peers. Elementary-age children with AD/HD often have very little insight into their problems and interventions need to be almost entirely implemented and managed by adults. Fortunately, insight and self-directed coping with AD/HD can start to improve during adolescence.

Although full consideration of the host of developmental changes that arise during the transition from childhood to adolescence is beyond the scope of this chapter, we consider five issues that are salient to adolescence that deserve consideration with respect to treatment. First, adolescence is typically marked by greater cognitive capacities that are characteristic of formal operations. These new capacities involve the ability to think more abstractly and the increased ability to solve problems in a systematic manner. Consequently, adolescents, as compared to children, are more self-conscious, better able to analyze their own performance, better able to predict their own behavior ahead of time, and better able to critically evaluate possible available strategies to achieve a goal.[15] These improved cognitive abilities and new social expectations might

impact the effectiveness of available treatments for adolescents as compared to children. Second, adolescence is marked by a focus on identity formation and the establishment of greater independence. Related to this is the notion of adolescent "storm and stress" which is often manifested as increased oppositionality toward authority figures. Third, difficulties associated with increased independence and autonomy are typically met by a greater reliance on peers as intimate partners rather than simply friends with similar interests. Fourth, the transition from elementary to middle and high school results in a different daily routine. Adolescents routinely interact with up to six different teachers across the course of the day and are expected to have greater responsibility in keeping up with their materials, staying on task, and arriving on time, and so forth. Finally, physiological changes, such as growth and the development of secondary sexual characteristics, have major influences on social behavior and its consequences.[15] For example, aggression and defiance, which often accompany AD/HD, are more problematic with a six-foot-tall, 180-pound individual as compared to a four-foot-tall, 80-pound individual!

As the adolescent with AD/HD matures into adulthood, the problems associated with the disorder tend to get more varied and dire. Significant school problems include discipline or academic problems that may lead to expulsion or school failure. Unfortunately, AD/HD is clearly associated with elevated risk for failing to graduate from high school, and is probably associated with increased risk for failing to graduate from college. Most likely due to comorbid CD, many individuals with AD/HD engage in delinquent behavior and substance abuse and suffer the legal and health consequences of these risky behaviors. Interpersonal difficulties may lead to conflict at home and difficulty maintaining long-term relationships, either friendships or romantic relationships. Problems in the workplace may arise due to behaviors related to inattention and/or impulsivity, or due to poor social or learning skills. There is now fairly strong documentation that individuals with AD/HD are more likely to be involved in motor vehicle accidents than their non-AD/HD peers. It seems likely that there is an elevated risk for other accidents due to impulsivity and/or inattention. Another concern is risky sexual behavior and related consequences such a pregnancy and sexually transmitted diseases. Finally, as discussed in the comorbidity section, there is an elevated risk for depression and anxiety.

To summarize, individuals with AD/HD show a higher likelihood of experiencing psychiatric, medical, vocational, legal, interpersonal, and academic difficulties than persons without AD/HD.[2] It is important to note that many persons with AD/HD manage to avoid all of these problems and lead fairly normal lives. Others suffer transient problems, which they overcome or find accommodations for, and then function without great difficulty. Some, however,

are so seriously impaired by AD/HD and related consequences that they lead troubled lives and may become a significant burden on family, friends, and society. Appropriate treatment could presumably prevent these negative outcomes and high costs to society.

TREATMENT FOR AD/HD

What Are the Essential Ingredients for Effective Treatment of AD/HD?

The most critical consideration when treating AD/HD is that the intervention needs to be active at the point of performance. Numerous studies have shown the effects of medication in the treatment of AD/HD are temporary and that behavior therapies and skills training techniques often employed to treat AD/HD do not generalize readily to other settings.[2,5,10,12] Thus, the medicines used to treat AD/HD need to be in the person's system when they are engaged in the activities the medicine is supposed to help. Likewise, behavioral interventions need to be active in all of the settings where behavioral support is needed. Skills and behavior management plans need to be actively supported at the point of performance to be effective.

A second essential ingredient is an individualized, evidence-based approach to determining what works. Too often, persons with AD/HD get the treatment of the week (e.g., they try the newest drug, the newest self-help routine, or the newest biofeedback technique) without careful consideration if that treatment works for them. A good starting place is to select evidence-based treatments that have a strong track record of effectiveness in the scientific literature (e.g., stimulant medication and behavioral interventions). It is prudent to stay away from treatments that do not have a strong evidence base (e.g., biofeedback) or have evidence that they do not work (e.g., dietary methods). Even when using a proven treatment, response to AD/HD treatment is highly idiosyncratic, so all treatments should be carefully studied using individual case study methods. If your doctor or psychologist does not take baseline measures (e.g., parent and teacher ratings) prior to making treatment changes (e.g., a different dose of medicine or new behavior plan), your treatment is not being properly evaluated.

What Are the Best Evidence-Based Treatments Currently Available for Reducing AD/HD Symptoms?

A multimodal approach to treatment of AD/HD symptoms is recommended as the best way to treat the disorder.[2,5,10,12] That is, in order to fully address all the symptoms characteristic of AD/HD, it is necessary to provide

treatment in a variety of different ways. For example, a comprehensive treatment of the disorder should include a combination of medical, educational, behavioral, and psychological interventions. These interventions do not have to be administered by a single individual, but can be provided by a team of professionals.

What Are the Most Commonly Used Medicines for AD/HD?

Currently, most children are treated for AD/HD with stimulant medication.[10,12] Over the past 30 years, methylphenidate, which is the active ingredient in Ritalin, has been the most commonly prescribed drug for AD/HD. Many other stimulants are on the market and recently Adderall, which is a mixture of amphetamine salts, has been capturing a larger part of the market share. A promising new drug, Straterra, may achieve its effects in a method somewhat different than the stimulants. Most physicians agree that the stimulant drugs above, especially long-acting versions that are taken once a day (e.g., Concerta and Adderall XR) are the first choice medications for AD/HD.[2] Straterra is probably worth trying if methylphenidate or amphetamines do not work. Some physicians prescribe antidepressants and antihypertensives to treat AD/HD, but this is far less common than stimulants and Strattera and is probably not as safe and effective.

How Safe and Effective Are the Commonly Used Medicines for AD/HD?

The short answer is, pretty safe. This can be said with some authority because stimulant medication is probably the most heavily researched medicine in child psychiatry, and possibly in all of pediatric medicine. Probably the greatest safety concerns are slowed growth and the risk of developing motor tics. Fortunately, almost all stimulant side effects, which are rare, are dose-dependent, and remit with a lowered dose or discontinuation of the medicine.

The issue of effectiveness and practicality is a bit more complicated. For a detailed discussion of the efficacy, safety, and practicality of medications used to treat AD/HD, we recommend a recent review by Smith and colleagues.[12] For present purposes, we would like to note that stimulant medication has been shown to be effective over as long as five years if taken regularly, and that it works for children, adolescents, and adults. Current estimates of positive response rate of stimulant medication are around 82 percent.[2] Since the identification of AD/HD seems to be occurring earlier and earlier, it is worth mentioning that stimulants have been found to be safe and effective for children between the ages of four and five; however, very little is known about the safety of these drugs for children ages three and younger.

An important practicality consideration is that methylphenidate and amphetamines are considered rapid acting stimulants since they produce effects within 30–45 minutes following oral ingestion and peak in their effectiveness within two–four hours. These drugs lose effect after three to seven hours, so it is important to administer them frequently (often two or three times a day). A recent development in the treatment of AD/HD is the emergence of extended release forms of methylphenidate. While earlier versions of long term stimulants did not work for many children, newer versions such as Adderall XR and Concerta appear to be more effective. Benefits of these newer once a day delivery systems include decreased issues with medication compliance, more consistent release of medication into the system (less highs and lows of medication effectives), and no need for a midday booster dose to complete homework.

It is noteworthy that the safety and efficacy of drugs other than stimulants and Strattera is very limited. Some physicians prescribe antidepressants or other drugs (e.g., Clonadine) either alone or in combination with stimulants to treatment AD/HD. Such practices are not well-supported by research and should be very carefully monitored, if tried at all (see Smith et al).[12]

Can AD/HD Be Prevented?

Since the cause of the disorder has not yet been identified, it is not possible at this time to determine whether or not AD/HD can be prevented. While some groups of researchers and organizations claim that symptoms can be reduced using various techniques and strategies, there is currently no scientific proof that any of these techniques can be used to help prevent AD/HD.[2]

In terms of prevention, the best approach to take to AD/HD is analogous to taking care of your teeth. Some people are going to be more prone to cavities than others. Therefore, some may need more vigorous oral hygiene and more frequent checkups than others. Early and persistent intervention should prevent major problems from developing. Thus, like dental cavities, AD/HD might not be completely preventable. Nevertheless, good preventive care can prevent major problems (e.g., school problems akin to toothaches) and the need for major treatment (e.g., tutoring akin to root canals).

What Are Some of the Common Myths Regarding Treatment of AD/HD?

Taking about all of the myths related to treating AD/HD could fill more than an entire book. There is no way we can adequately address this complex and potentially emotional issue in this short section. However, we will offer a few broad comments.

First, not all treatments are equal. Treatments for AD/HD can be crudely categorized as evidence-based, untested, and disproven.[2] While experts researching the treatment and management of AD/HD have identified several empirically proven forms of treatment for the disorder, many organizations and specialists continue to promote untested or even disproven therapies in the treatment of AD/HD. Currently, many forms of treatment for AD/HD symptoms commonly suggested by the popular press and media are not evidence-based. Implementing non-evidence based treatment for AD/HD symptoms often results in a failure to reduce impairment. Moreover, in some circumstances, untested or disproven therapies may actually result in a worsening of symptoms than no treatment at all.

So-called treatments for AD/HD that are disproven include elimination diets (e.g., the removal of sugar, additives, or dyes from the individual's food intake), megavitamins and minerals, sensory integration training, chiropractic skull manipulation, play therapy, individual child psychotherapy, biofeedback, self-control therapies, and social skills therapies conducted in clinics.[2] Many other such treatments for AD/HD have not yet been adequately tested, and following testing might be added to the list of disproven attempted treatments.

Many people profess to know that one or more of the above treatments works. These beliefs are persistent and are often related to mistakes in causal thinking and ignorance or bias regarding good research. For example, many parents believe that sugar causes their child with AD/HD to be hyperactive. As evidence, they may cite some episodes of particularly bad behavior at a birthday or Halloween party. What they are missing in these cases is that many factors other than sugar can account for poor behavior at parties, such as unclear rules, excitement, and substances such as caffeine. For every complex problem (e.g., AD/HD), there is a simple solution (e.g., sugar restriction), and it is wrong.

Parents who believe that some interventions are effective (e.g., sugar restriction) might be correct about behavior change, but could be wrong about the cause. For instance, some parents are adept at paying close attention to their child and setting limits. Thus, good parenting rather than the diet itself must be considered as a cause of change, rather than less sugar. We should note, however, that even those parents who are adept in parenting may create stigma and unnecessary parenting stress through interventions such as restriction of sugar. For instance, consider the labeling that occurs when a school class or group of peers is told that a child cannot have candy, soda, or other sweets because the child has AD/HD. Given that dozens of studies have shown that restricting sugar has no positive effect, all of the risks of controlling sugar are done with no real benefit to the child. Thus, disproven interventions for AD/HD are a losing proposition for persons with AD/HD.

Some other myths about AD/HD are the so-called garage mechanic and magic bullet approaches to treatment. The garage mechanic approach is very appealing from an adult effort standpoint because it is akin to dropping the car off at the shop and getting it fixed. This does not work with AD/HD because, as noted elsewhere in this chapter, an essential element of effective treatment is that it is active at the point of performance. Play therapy with a therapist or biofeedback training is almost certainly not going to help AD/HD-related problems at home or in the classroom.

With regard to the magic bullet myth, this is akin to hoping that AD/HD can be cured by a single intervention. There is no known treatment that cures AD/HD. Therefore, we recommend a dental model approach to this disorder, with persistent day-to-day intervention, regular checkups, and occasionally some extensive professional help. Taking stimulant medication regularly and daily behavioral contingencies are akin to brushing and flossing one's teeth. Visits to the doctor are like regular checkups. Family therapy, tutoring, or school-based interventions are akin to getting braces. Sometimes some exceptional structure is needed that, following growth, maturation, and good care, can be relaxed or removed when good progress is made.

EDUCATION ABOUT AD/HD

What Have Been Some Major Developments in AD/HD Research in the Past Decade?

There have been numerous breakthroughs in the identification, diagnosis, treatment, and management of AD/HD within the past decade. For example, the shift in conceptualization published in the *DSM–IV* suggesting that AD/HD is a set of disorders as opposed to one condition has been central in shaping research development on the origins of the disorder as well as in ways to treat it. For example, we now know it is possible for someone to display difficulty with sustaining attention independently of difficulties with hyperactivity or impulsivity and vice versa. Also, it is possible for some people to show difficulty with a combination of both areas.

Other notable advances have been made in the treatment of AD/HD. Within the past decade, numerous treatments have been disproven in the management of AD/HD, while others have repeatedly been shown to be effective in the treatment of AD/HD. Also with regards to treatment, advances in medication delivery systems such as the creation of once daily delivery doses have helped many families to decrease side effects, boost productivity, and facilitate medication compliance.

While still a growing area of research, experts are beginning to develop a clearer picture of AD/HD among adolescents and adults. Though currently very little is known about AD/HD among adolescents and adults when compared to children, considerable advances have been made such as ascertaining that AD/HD is not merely a childhood disorder that individuals grow out of. Also, it is becoming increasingly clearer that children and adults do not always display the same classic AD/HD behaviors, and so identification and treatment for these two groups should differ to address the different needs of the groups.

What Are Some Major Unanswered Questions about AD/HD?

The answer to this question might depend on whom you ask. We think there are several pressing questions. These are listed below. First, the cause, or more likely causes, of AD/HD need to be better understood. This includes advances in the understanding of the genetics of AD/HD and the effect of exposing individuals with AD/HD tendencies to different environments that may shape the expression of this multiply determined disorder. Second, it would be helpful to be able to predict individual response to treatment in advance. Currently, finding which treatment works best for an individual is a matter of trial and error. Third, the long-term effects of treatment for AD/HD are currently very poorly understood. Most current data is for five years or less (usually much less). Data on various approaches to treatment with implications for long-term results, such as medication holidays when children are out of school, are almost completely unstudied. Another big question, which may be especially hard to answer, is why has there been such a big increase in awareness of AD/HD over the past couple of decades?

What Are Some Reputable Sources that Can Further Help Educate Me about AD/HD?

Within the past few years, AD/HD has been increasingly highlighted by the popular press and media, with countless television and radio shows addressing the issue both accurately and inaccurately. In addition, numerous books have been written on this disorder and literally thousands of Web sites dedicated to AD/HD are currently accessible to the general public. While considerable amounts of information are readily available to the public, it is important to note that the amount of misinformation on this condition is equal to or likely surpasses the amount of reputable information on this topic. Thus, consumers should be very wary when consulting sources about AD/HD.

A very good resource for parents is Children and Adults with Attention-Deficit/Hyperactivity Disorder (CHADD), which is a non-profit organization serving children and adults with AD/HD. Their Web site address is http://www.chadd.org/ and information is posted in both English and Spanish. CHADD offers AD/HD fact sheets, magazine subscriptions, contact numbers for popular organizations, information regarding cutting edge AD/HD research findings, education and employment for individuals with AD/HD, as well as numerous other helpful links and services. The information posted online is also available in hard copy form.

Families who are explicitly searching for information published on AD/HD in Spanish should consult J. J. Bauermeister's *Hiperactivo, impulsivo, distraido, Me conoces?* (New York: Guilford).

The National Institute for Mental Health (NIMH) also offers accurate and detailed information on AD/HD. Their Web site is http://www.nimh.nih.gov/healthinformation/adhdmenu.cfm. This site includes information on defining AD/HD, identifying the disorder accurately in children, a listing of appropriate treatment for the disorder, and identifying appropriate services for children with AD/HD.

College age students with AD/HD may benefit from consulting J. S. Bramer's *Succeeding in College with Attention-Deficit Hyperactivity Disorders: Issues and Strategies for Students, Counselors, and Educators* (Plantation, FL: Specialty Press, Inc).

Finally, other helpful Web sites include: ADDA Organization, http://www.add.org; National Information Center for Children and Youth with Disabilities, http://www.nichcy.org; ADD warehouse, http://www.addwarehouse.com; and the Council for Exceptional Children, http://www.cec.sped.org.

What Should I Do If after Reading This Chapter I Think I May Have AD/HD?

If after reading this chapter you suspect that you or someone close to you may have AD/HD, you should schedule an appointment with your primary care physician in order to learn more about the disorder. If the primary care physician suspects that the individual in question is experiencing symptoms characteristic of AD/HD, a comprehensive examination should be conducted. It is important to keep in mind that the diagnosis of AD/HD is a fairly complex and lengthy process, and that simple self-report questionnaires found online often fail to accurately identify AD/HD symptoms. Thus, it is the recommendation of the authors that individuals always seek professional advice in the diagnosis, treatment, and management of AD/HD.

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Obsessive-Compulsive Disorder: Diagnostic, Treatment, Gender, and Cultural Issues

Rudy Nydegger and Michele Paludi

> *How can you diagnose someone with an obsessive-compulsive disorder, and then act like I have some choice about barging in here?*
> —Melvin Udall, *As Good as it Gets*

In the movie *As Good as it Gets*, Melvin Udall (played by Jack Nicholson) will not walk on lines in the sidewalk or on tiled floors. After he enters his apartment he locks the door five times and then proceeds to wash his hands. Udall's medicine cabinet is replete with soaps, and each time he washes his hands, he opens two new soaps, washes his hands in near boiling water and then discards the soaps. Udall describes his behavior as, "I've got this, what, ailment." The ailment to which he refers is obsessive-compulsive disorder (OCD). While the movie's director, James L. Brooks, tries to put a comedic slant to Udall's "ailment," in reality, OCD is no laughing matter.

OCD afflicts approximately 3.3 million American adults ages 18 to 54, or about 2.3 percent of people in this age group in a given year.[1] Research indicates that OCD typically begins during early childhood or adolescence and affects females and males equally,[2] although symptoms observed in children are more frequently observed in boys and those observed in adolescence are more common in girls. Individuals with OCD suffer from obsessions, which are repeated, intrusive, unwanted thoughts that cause distress and extreme anxiety.[1] In addition, these individuals may also suffer from compulsions, referred to as rituals (e.g., Udall's hand washing) that the person with the disorder goes through in an

attempt to reduce his or her anxiety. Performing rituals, however, provides only temporary relief, and not performing them markedly increases anxiety. Individuals who have obsessions do not automatically have compulsive behaviors. Conversely, most people with compulsions do have obsessions, for example, thoughts of becoming infected by shaking hands with others.[1]

Characteristics of individuals with OCD involve issues of control, perfection, and orderliness.[3] Fears of loss of control over what might happen to them haunts these patients constantly, and thus they control the things that they feel that they can, even if that control is irrational, uncomfortable, embarrassing, and dysfunctional. Their need to accomplish everything right often interferes with their productivity. Individuals with OCD also set unreasonably high standards for themselves and others. They tend to be critical of others as well as themselves when they don't live up to these high standards.

In the workplace, individuals with OCD avoid working in teams since they believe coworkers are incompetent or careless. Furthermore, they avoid making decisions because they fear making mistakes. OCD sufferers are rarely generous with their time or money, and often have difficulty expressing emotion.[1]

Most people with OCD recognize that their behavior is odd and may even describe it as crazy, but clearly feel that they don't have the ability to change it or to avoid performing the rituals. Other patients actually seem to feel that there is nothing unusual about their behavior and believe that what they are doing is entirely reasonable. This lack of insight presents a slightly different twist on the understanding and treatment of OCD.

For many people suffering from OCD, the rituals are like severe superstitions. Patients may know that their behavior is not really necessary and even might understand that it is irrational, but so often fear unknown catastrophic outcomes that they feel that performing the ritual is good sense just in case. Maxmen and Ward[4] refer to this thought process as pathological doubting: "If I don't do this something terrible will happen."

Children, adolescents, and adults who suffer from this disorder may be reluctant to seek help because they are embarrassed or self-conscious about this complex disorder, or they fear having to give up the security of the compulsive rituals. Thus, they find ways to hide their behavior from others in such a way as to not draw attention to themselves. They are usually so concerned about how others will look at them that they often keep their problems a secret.[4] We note, however, that people of color may be reluctant to seek treatment because of cultural values associated with keeping personal, private issues within the family. We will discuss this further in a later part of this chapter.

OCD is sometimes accompanied by depression, eating disorders, substance abuse, attention-deficit/hyperactivity disorder (AD/HD), or other anxiety disorders.[5,6] While traditional theories about the causes of OCD included

family problems or attitudes learned in early childhood (e.g., inordinate emphasis on cleanliness, or that certain thoughts are unacceptable), current evidence suggests OCD has a neurobiological basis. Thus, research now focuses on the interaction between neurobiological factors and environmental influences.[7]

In this chapter we will discuss the etiology of OCD, diagnostic issues, comorbidity, and pharmacological and psychotherapeutic approaches to dealing with this disorder. We also offer distinctions between OCD and obsessive-compulsive behaviors, for example, (1) childhood bedtime rituals, the goal of which is to learn mastery over one's environment and (2) thoughts (feelings of uncleanliness) and behaviors (repeatedly checking the locks in their home) common to sexual assault survivors who attempt to be in control in the present of what they feel they were not in control over in the past prior to the sexual assault.

We will also address the life-cycle developmental nature of OCD in this chapter. Gender and race comparisons will also be discussed, noting the bias that has typically existed in studying OCD in women and people of color as well as in the diagnosis and treatment of this disorder. We will conclude this chapter with a discussion of the quality of life issues of individuals with OCD.

We begin with a case study that illustrates the symptoms of OCD.

Charlie and His "Stuff"

Charlie's alarm clock went off at 4:30am, and he knew that he had to get up and get moving because he had to be to work before 9, and his boss was really fussy about lateness. He sat up, reached over with his right hand to turn off the alarm, and pushed the button down four times and then stood up and put his slippers on—right foot first of course. He straightened up the pillow, pulled up the sheet, brought the blanket up to the top of the sheet, and then realized that he hadn't turned the pillow over, so he took everything off of the bed and started to make it again. After several tries he got it right, and finished the bed.

Next, Charlie went into the bathroom and washed his hands four times, and then used the bathroom and washed his hands three times but couldn't remember if he had done it two or three times, so he started again and washed them four times this time. He started his shower and undressed, folding his bed clothes and putting them neatly in the clothes hamper. As he stepped into the shower he remembered that he hadn't said his morning prayers, so he stepped out of the shower, turned the water off, and began his morning prayer ritual. As he was saying The Lord's Prayer for the tenth (and hopefully final) time, he happened to think of the really cute girl in the next office at work, and he briefly thought of what she would look like naked. Oh no! He had an impure thought while trying to say his prayers so he had to start over again. He couldn't imagine what God would do to him if he couldn't say his prayers without impure thoughts. He had to go through all 10 prayers only thinking about God or Jesus (Mary was okay too), or he had to start over. However,

whenever that girl entered his thoughts it was really difficult to keep from thinking about her. Today it only took him 20 minutes to finish his prayers, so it wasn't too bad.

   After going through the elaborate washing and rinsing rituals he had to go through in the shower, then brushing his teeth, combing his hair, putting on deodorant and aftershave, and getting dressed—all in the proper order, he was able to fix some breakfast and go to work. Today was going to be a good day. It only took him three and one-half hours to get ready for work, and he was feeling pretty good about it.

Charlie has OCD. However, he, like many people with this condition, has not sought treatment. Why? He knows how crazy his behavior looks, and the idea of having to tell someone about it is just too humiliating. Further, the idea of giving up the rituals that seem to keep him safe is just too scary. Charlie has few friends, no girlfriend, and spends most of his free time alone at home. This is really the only place he feels safe, and the only place where he can openly take care of the rituals that he feels that he must fulfill to avoid some awful outcomes he can't even imagine—but he knows they would be terrible. The real tragedy for Charlie is that he has a very treatable condition, with new and effective ways to control and treat this very troublesome disorder. Most people with this condition do not get adequate treatment, and thus they live a life of quiet desperation, hiding their dysfunctional life from people who would laugh, judge, berate, and abuse them.

SYMPTOMS

OCD is a disorder that seems to have its roots in childhood with over two-thirds of patients reporting substantial symptoms before the age of 15, and almost all patients report having had some symptoms in childhood. OCD tends to be more common among patients who are more highly educated and with higher socioeconomic status and higher IQ scores. The lifetime prevalence rate is about 2.6 percent, and the rates between the sexes is about equal, although boys/men tend to clinically manifest the disorder about five years before girls/women.[4] This is consistent with the finding that there are more boys than girls who suffer from the disorder in childhood.

The onset of OCD is usually insidious, but it may also have an acute onset usually following some stressful or traumatic event. OCD is recognized as a chronic disorder although the symptoms tend to wax and wane.[4] According to the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition *(DSM–IV)*, OCD is characterized by recurrent obsessions and/or

compulsions that interfere considerably with a person's daily functioning.[8] Further, obsessions are, "persistent ideas, thoughts, impulses, or images that are experienced as intrusive and inappropriate and cause marked anxiety or distress" (p.418).[8] Compulsions are defined as being "repetitive behaviors . . . or mental acts . . . the goal of which is to prevent or reduce anxiety or distress" (p. 418).[8] Over 90 percent of patients suffering from OCD have both obsessions and behavioral rituals, and only 2 percent of the sample studied reported only obsessions when mental rituals were added.[9] It is generally assumed that compulsions are performed in order to reduce distress associated with obsessions.[1]

Interestingly, this view is consistent with Freud's early view of OCD, in which he described compulsions as being based on the defense of "undoing" which was intended to "undo" the symbolic harm done by the obsessive thoughts.[10] Psychoanalytic theory suggests that OCD develops in three phases: first, an internally perceived dangerous impulse is recognized; second, there is a threat perceived of what might happen if the impulse were acted upon; and, third, the person calls upon defenses to avert the feared threat.[4] A more recent study[9] found that 90 percent of patients stated that compulsions functioned to prevent harm associated with the obsessions or at least to reduce obsessional distress.

One of the major complicating factors with OCD is the frequent finding of comorbidity. That is, very often a person with OCD has at least one other diagnosable psychological condition. By far, depression is the most common complication, although there are several others as well. Although going insane, being totally incapacitated, or permanently incarcerated are common fears experienced by patients with OCD, these in fact rarely happen. Further, despite much suicidal thinking, less than 1 percent of patients with OCD actually commit suicide. There are also some more uncommon disorders that may coexist with OCD, but are not necessarily caused by it. These include anorexia and bulimia, trichotillomania, Tourette's syndrome, and body dysmorphic disorder.[4]

Since depression is the most common comorbid condition, it has been studied more often than some of the others identified above. Research suggest that there is direct evidence that disturbances in OCD are mediated by comorbid depressive symptoms.[11] Patients who scored high on the Hamilton Rating Scale for Depression (HRSD) performed significantly worse than controls and patients with low HRSD scores on several neuropsychological tests.[7] Further, patients with high HRSD scores showed deficits on a (creative) verbal fluency test. It has been found that patients often have difficulty with so-called executive functions, and it appears that this may be due in part at least to symptoms of depression.[11]

The relationship between OCD and post-traumatic stress disorder (PTSD) has also been discussed in the literature. Huppert et al.[12] concluded that the relationship between these two disorders may largely be accounted for by a combination of symptom overlap and comorbid depression in both conditions. Thus, the relationship between OCD and PTSD is based upon the fact that the two disorders share some similar symptoms, and that depression is a complicating factor for both problems.

One of the authors of this chapter (Nydegger) has treated a patient who had pre-existing OCD, and then due to a life-threatening emergency developed PTSD. Treating these conditions was very complicated, and it was often difficult to decide what was actually being treated. This was even more problematic because after the PTSD arose, the symptoms of OCD were exacerbated, and the patient became depressed as well. Fortunately, with very persistent and consistent treatment with cognitive-behavioral psychotherapy and psychotropic medications, the patient gradually began to improve and start to function more normally. However, this case clearly demonstrated how challenging treating OCD can be when complicated by a condition like PTSD. Clearly, in this case the OCD certainly didn't cause the PTSD, nor did the PTSD cause the OCD. However, the treatment of both problems was complicated by the presence of the other condition.

When dealing with complex diagnostic situations, care should be taken in making the appropriate formulation of the problem. For example, when making a differential diagnosis, OCD should not be diagnosed when the obsessions and the compulsions arise out of another disorder. For example, schizophrenic delusions are not the same thing as obsessions even though there may be an obsessive quality to them. Also, we find obsessive brooding and self-devaluing in major depressive disorder (MDD), and both MDD and OCD have episodic courses. However, this does not mean that MDD is OCD. In fact, OCD should only be diagnosed in this case if it precedes the MDD.[4]

It is often thought that patients with OCD understand that their disorder is irrational, and often this is the case. However, there are some patients who feel that their obsessions and the resultant compulsions are entirely real and that there is nothing irrational about them. This variant of OCD used to be called atypical, and these patients do not have a less favorable prognosis.[4] The present view of this issue is that there is a continuum of insight or strength of belief among patients with OCD, and that not all patients recognize the senselessness of their thoughts and behaviors. This view has become so predominant that it led to a revision of the *DSM–IV* definition of OCD, so that some patients may now be diagnosed as having OCD "with poor insight."[13]

One condition that is very similar to OCD is obsessive-compulsive personality disorder (OCPD). However, it is clear that these two disorders are

not related other than the fact that there are similarities in symptom profile. Otherwise they are very different. For example, OCD is egodystonic and OCPD is egosyntonic. That is, people with OCD don't like the symptoms and find that they severely interfere with their lives. People with OCPD just find their behavior normal and don't see anything wrong with it. Further, OCPD doesn't involve true obsessions and true compulsions.[4]

OCD is often confused with other types of compulsive disorders like compulsive gambling, eating, and sexual behavior. People with OCD don't like having to do what they do, and they certainly don't enjoy the obsessive thinking that they often have to experience. However, people with these other compulsive disorders actually enjoy the compulsive activities, and they don't imagine some type of disaster if they don't complete the compulsive action. In fact, they may find the compulsive behavior as a distraction from unpleasant thoughts or feelings that may otherwise trouble them.[4]

Attempts have been made to categorize the symptom patterns of OCD. Typically, the groupings that are usually referred to are: washers; checkers; doubters and sinners; counters and arrangers; and hoarders.[4] Factor analytic studies have identified several factors. For example, Kloosterman, Antony, Richter, and Swinson[14] identified four factors that captured most of the symptoms: obsessions and checking; symmetry and ordering; contamination and cleaning; and hoarding. Subsequent analyses[14] also suggested that groupings based solely on overt behavior may be inadequate, and future analyses might look for other relevant factors as well. Mataix-Cols, do Rosario-Campos, and Lechman[15] found five very similar factors: symmetry; ordering and hoarding; contamination; cleaning and obsessions; and checking. They suggest that OCD might best be understood as a spectrum of potentially overlapping syndromes with similar symptom patterns.

EXPLANATIONS FOR OCD

Research on OCD has suggested a biological basis for this disorder. Psychopathology in general and obsessions in particular tend to run in the families of people who suffer from OCD. Further, concordance rates for OCD are 70 percent for monozygotic twins and 50 percent for dizygotics.[4] This certainly suggests some type of genetic mechanism as well as environmental factors. However, we note that an individual with OCD has a 25 percent chance of a first degree relative having it as well.[4]

The biological research in general indicates abnormalities in the frontal lobes, basal ganglia, and cingulus areas of patients with OCD. In fact, as we will discuss later, in extreme cases cingulotomy has improved or even cured OCD. Further, it is known that the basal ganglia is involved in over-learned

routine behaviors such as grooming, and the prefrontal areas in planning and organizing behaviors. It is also assumed that since the drugs that seem to help OCD are serontonergic that the serotonin system is somehow involved with OCD as well.[16]

Another interesting line of biological research on OCD found that patients with a compulsive hoarding type of OCD had significantly lower glucose metabolism in the posterior cingulate gyrus and cuneus. This is a different pattern of cerebral glucose metabolism than is found in non-hoarding OCD patients or in non-OCD controls. This research suggests that "OCD hoarding may be a neurobiologically distinct subgroup or variant of OCD whose symptoms and poor response to anti-obsessional treatment are mediated by lower activity in the cingulate cortex" (p.549).[7]

One final biological approach to the understanding of OCD comes from studying infectious disease. It has been found that children who suffer from group A streptococcal infections can develop an acute form of OCD.[17] This is referred to as pediatric autoimmune neuropsychiatric disorder associated with group A streptococcal infection (PANDAS). Other studies[18] have found that infections with group A beta-hemolytic streptococci, among others, can trigger autoimmune responses that might exacerbate some cases of childhood-onset OCD, and can also impact or cause tic disorders including Tourette's syndrome. These studies, too, imply a neurophysiological basis for OCD, and even suggest a mechanism for how it might develop. We will explore some of the treatment implications of this later in the chapter.

In addition to the biological views of OCD, there are cognitive and neuropsychological components of OCD as well. For example, people with OCD have poor memory function and cognitive organizational deficits.[19] They are more likely to suffer rigidity in thought[19] and have an apparent diminished ability to selectively ignore competing external (sensory) and internal (cognitive) stimuli, especially intrusive thoughts.[20]

One interesting memory study[21] found that OCD patients showed a better memory for contaminated objects than for clean ones. This pattern was not found in normal controls. Thus, for these patients it wasn't just a general deficit in memory, because objects that were related to their obsessions were more easily remembered; or at least this is what appears to be happening.

Szechtman and Woody[22] suggest that people with OCD don't get a "feeling of knowing" that a task or activity is complete. Thus, if a person is motivated to do something that will make them feel more secure and they don't get a sense of closure that would terminate the security motivation system, then they will continue to feel that this need still required fulfillment. Thus, patients with OCD do not have this terminator emotion to the same extent as do normal people.

In another series of cognitive studies on OCD Savage et al.[23] found that non-verbal memory problems in OCD are mediated by impaired strategic processing.

While this line of cognitive research implies psychological factors as well as biological ones, there is nothing in this research that is inconsistent with a biological etiology, and in fact some of the cognitive researchers have even suggested neurobiological mechanisms that might be implicated, or at least have speculated that there might be some underlying biological basis to the cognitive disturbances.[22]

DEVELOPMENTAL CONSIDERATIONS

As we discussed in the introduction, OCD typically begins or at least has its origins in early childhood or adolescence.[24] Symptoms that are observed in children are more frequently observed in boys; those seen in adolescence are more common in girls. About 1 percent of children have OCD.[24] It is recommended that it is best to treat OCD early because the longer OCD goes untreated, the more generalized the symptoms become, thus making it more difficult to treat.[24]

OCD may follow children into adulthood, and even with treatment during childhood some children may have no or minimal symptoms as adults. Some children go into remission, only to have symptoms return during adulthood. Symptoms experienced as a child are likely to be different from those experienced as an adult.[1] It has also been hypothesized that hormones and stress may cause changes in an individual's biological makeup, thus affecting OCD symptomatology as well.[2]

Some researchers are pursuing lines of research that suggest that there may be different variants of OCD that affect children and adults differently. For example, one series of studies conducted in India found gender differences, symptom pattern differences, and onset differences between juvenile OCD, juvenile-onset adult OCD, and adult-onset OCD. This suggests that juvenile OCD could be a developmental subtype of ODC, and may not be the same disorder that we see in adults.[25]

Young people with OCD had higher scores on inflated responsibility, thought-action fusion, and one aspect of perfectionism (e.g., concern over mistakes) than did other individuals. In fact, an inflated sense of responsibility predicted symptom severity in children. While there is some evidence that there is a downward extension of cognitive appraisals by adults in childhood OCD, there is also evidence of developmental shifts in cognitive appraisal as well.[26]

In order to meet the criteria for OCD as outlined in the *DSM–IV*, individuals must have either obsessions or compulsions or both. Most children and

adolescents do have both, as do most adults.[2] In screening for OCD in childhood, questions about obsessions and compulsions are asked of children, for example:

> Do you have to check things over and over again?
> Do you count to a certain number or do things a certain number of times?
> Do you have to wash your hands a lot, more than most children?
> Are there things you have to do before you go to bed?

The majority of children and adolescents answer "yes" to these questions. Simply answering "yes" does not necessarily indicate OCD. In fact, children exhibit normative, developmentally appropriate behaviors and rituals that do not constitute a diagnosis of OCD.[2] These behaviors (e.g., routines at meal-time, bathing, and bedtime) are likely to be exhibited between the ages of two and eight years. Children may insist on bedtime rituals, collect sports cards, comic books, and/or dolls. Game playing in middle and later childhood frequently becomes highly ritualized and rule-bound. These behaviors are a direct response to children's need to control and master their environment and their anxiety. As children gain mastery, they become increasingly independent and therefore enhance their confidence and self-esteem.[27]

In addition, children often exhibit superstitions, a form of magical thinking in which they believe in the power of their thoughts or behavior to control events in their world.[27] This kind of magical thinking is often found in children and may be found in adolescents as well.[28] Rhymes such as "step on a crack, break your Momma's back," also assist children in developing mastery. These rituals help children develop new competencies and define their world, although most of these ritualistic behaviors disappear on their own during middle childhood.[2] In adolescence, rituals may subside but obsessive preoccupation with an activity, a singer, or a sports idol is common. All of these behaviors are considered normative; part of children's and adolescents' identity development.[29]

Normative compulsive behaviors are distinguished from OCD on the basis of timing of behaviors, content of obsessions, and the severity of the symptoms. Unlike the childhood and adolescent rituals that produce competence and mastery, OCD produces dysfunction.[26] Therefore, children's responses to questions listed above are not the sole information collected by a psychologist in diagnosing children with OCD. In childhood OCD, a family history of OCD is more frequent than in adult onset OCD, suggesting that genetic factors may play more of a role in childhood OCD. Thus, a family history of all psychological conditions including OCD must be obtained when conducting a clinical interview and/or history. Information about motor and vocal tic disorders is important to obtain as well[30] since childhood-onset OCD may have a higher rate of comorbidity with Tourette's syndrome, PANDAS and

AD/HD.[31] OCD can make daily life difficult for children and adolescents. OCD behaviors consume a great deal of time and energy, making it more difficult for children to complete tasks, for example, homework or chores, and have a well-rounded life that involves varied activities and time with friends. Children and adolescents with OCD commonly feel pressured because they don't have enough time to do everything. They might become irritable because they have to stay awake late into the night or miss an event in order to complete their rituals. At school, children with OCD have difficulties with attention or concentration because of their intrusive thoughts.[32] In addition to feeling frustrated or guilty for not being able to control their own thoughts or actions, children with OCD experience anxiety and low self-esteem as a consequence of shame or embarrassment.[2]

Research suggests that common obsessions for children and adolescents include fear of germs, preoccupation with bodily wastes, lucky and unlucky numbers, intrusive sounds or words, and preoccupation with household appliances.[2] The most common compulsive behaviors identified in research include grooming rituals (e.g., hand washing, showering), repeating rituals (e.g., checking to ensure that an appliance is off, checking homework), rituals to undo contact with a "contaminated" object or person, hoarding things. Children with OCD also have an excessive fear of harm to self or others, and especially to their parents.[2]

Furthermore, children and adolescents with OCD frequently have obsessions and compulsions regarding food. They engage in abnormal eating habits (e.g., only eating one kind of food or never eating a type of food that might be good for them). This behavior could pose a serious threat to their nutrition, including the possibility of becoming anorexic.[5] In fact it has been demonstrated that there is higher than expected prevalence of OCD in young women with anorexia nervosa.[33]

WOMEN AND OCD

While there is not much difference in the incidence rates between men and women with respect to OCD, and the types of treatments that are offered are not gender specific it is misleadingly easy to assume that there are no relevant gender issues in OCD. However, it is clear that there are relevant gender issues, though there has not been as much research in this area as there should be. For example, a study on Turkish women with OCD found that patients suffering from this disorder were more sexually nonsensual, avoidant, and anorgasmic than women with generalized anxiety disorder.[34] Another study found that women with panic disorder or OCD had lower sexual desire and lower frequency of sexual contact than controls. Further, OCD patients reported more sexual dysfunction in total

and were less satisfied with their sex lives than were patients with panic disorder or controls.[35] These are just two examples of how OCD can affect women differently than men (there are no studies demonstrating these problems with men patients with OCD). In addition, women victims of sexual assault and pregnant women frequently exhibit obsessive-compulsive behaviors. We discuss these two issues in the next section. Of course the following discussion on sexual assault may offer some explanation for the above findings.[34]

Earlier in this chapter we made a distinction between OCD and obsessive-compulsive behaviors. We illustrated this distinction by discussing obsessive-compulsive behaviors that are developmentally normative in children who are learning to gain mastery and control over their environment.

Obsessive-compulsive behaviors have also been observed in women survivors of sexual victimization (i.e., child sexual abuse, rape, battering, and sexual harassment). The incidence rates of sexual victimization are alarming. Thirty percent of all women are battered at least once in their adult lives.[36] Incidence of sexual harassment among undergraduate women ranges between 30 and 85 percent each year.[37] The incidence is even higher for women in graduate school and in the workforce.[38] At least 20 percent of women have been a victim of incest.[39] Further, between 8 and 15 percent of college women have disclosed they were raped, at least one-third of battered women have been raped by the batterer.[36] The enormity of the incidence rates becomes more staggering when we note the untold numbers of children under 12 year of age who are victims of sexual assault.[40]

Several studies have documented the high cost of sexual victimization to women.[41] For example, rape survivors exhibit very high distress levels within the first week.[42] Their distress peaks in severity three weeks following the victimization, continues at a high level for one month, and then starts to improve three months post-rape. One-fourth of women who are raped continue to experience negative effects several years post-victimization. Similar findings have been reported for sexual harassment, incest, and battered women.[43]

As another example, adult women who were survivors of incest had identifiable degrees of impairment when compared with non-victims. For example, 17 percent of adult women who survived incest as children were clinically depressed, and 18 percent were considered severely psychoneurotic. In their lifetimes, survivors were more likely than non-victims to have had problems with depression, alcohol and other drug abuse, panic, and obsessive-compulsive behaviors.

With respect to engaging in obsessive-compulsive behaviors, survivors of sexual victimization report feelings of being unclean, even after repeated showering or bathing. In addition, survivors commonly check locks, check under their beds and behind shower curtains, repeatedly check the back seat and under the car before getting in, and repeatedly phone family and/or friends along the route

they are taking to return to their home to alert them where they will be and when they expect to return.[42] Some survivors carve or cut themselves to be rid of skin the perpetrator touched.[44] The goal of these behaviors is to defend the survivor against pain and to maintain control over their lives. These obsessions and compulsions are an attempt for the woman to be in control in the present of what they perceive they were not in control in their past before the victimization. This does not mean to imply that women survivors of sexual assault are responsible for the victimization and/or preventing it.

We note that these obsessive and compulsive behaviors are not only engaged in by survivors of sexual victimization but also by most adolescent and adult women in their daily lives. Women report feeling safer and more in control by using these obsessive and compulsive behaviors. These behaviors are coping mechanisms and safety strategies women develop from childhood to reduce fear and increase perceived safety. It is a normative part of female development, especially in a culture that enables sexual victimization against girls and women to go unpunished and blames women for their victimization.

Keeping these facts and examples in mind, one needs to be careful in diagnosing OCD in a girl or woman (and boy or man) who has been abused and/or assaulted sexually. Further, some types of obsessive worrying in women may not only be normal, but may be healthy and safe. For example, would one diagnose a woman as having OCD because she very frequently worries about being attacked, but lives in a high crime area and has to walk home from work at night? Or, would we think it pathological for a woman who lives alone to have a routine where she checks her apartment or home when she comes in, and checks the windows and doors before retiring at night?

Clearly, some obsessive and compulsive features may actually be secondary to a primary problem. When this appears to be the case, we should look at the sequence of events and when symptoms appear. If an individual has no OCD types of characteristics until *after* she or he has been victimized, then the symptoms are not likely to be OCD, but rather attempts at coping with the fears and powerlessness that comes from being a victim of violence. Similarly, when an individual's obsessions and/or compulsions are entirely rational and functional given her or his specific circumstances, then it makes no sense to pathologize them by labeling them as OCD.

Pregnancy has been frequently recognized as a major risk factor in precipitating OCD.[45] Since obsessions and compulsions can appear separately or with a comorbid anxiety or mood disorder, the incidence of OCD in women during pregnancy or postpartum is not known.[46] Two studies have provided some insight into prevalence rates. One reported that pregnancy was associated with onset of OCD in 39 percent of patients[47]; another reported 13

percent among their patients.[48] Williams and Koran[73] also reported OCD occurring in primigravida in 52 percent of the patients studied. Signs of postpartum OCD typically begin in women four to six weeks after giving birth.

Women are at greater risk for OCD during pregnancy and postpartum if they have a previous history and/or family history of OCD. It has been found that in pregnancy, OCD may worsen due to hormonal changes.[49] In addition, during pregnancy, women who have OCD are twice as likely to experience postpartum depression. Obsessional thoughts and compulsive behaviors related to women in the postpartum period include: obsessional fears about the baby's bottles being contaminated resulting in compulsively sterilizing the bottles, and obsessive fears about the baby drowning during bath time. In addition, postpartum women may frequently check on the baby because they fear something bad will happen. Some mothers worry obsessively about harming their baby, or about being an unfit mother.

RACE AND ETHNIC COMPARISONS

Relatively few empirical studies have been conducted concerning OCD in people of color.[50] The paucity of research on people of color is characteristic of research on all anxiety disorders.[51] Epidemiological data suggest that the prevalence of OCD among racial and ethnic minorities is equal to that of white individuals and that the core features of OCD are independent of cultural variations.

However, although the prevalence rates may be similar, racial differences in help-seeking and symptom presentation may result in underreporting and misdiagnosis.[52] Fontenelle, Mendlowicz, Marques, and Versiani[53] reported that the content of obsessions is related to culture. They reported more aggressive and religious obsessions among Brazilian and Middle Eastern individuals than individuals from North America and Europe. In addition, Neal-Barnett[50] has identified that there are barriers to people of color seeking treatment for OCD. For example, African Americans and American Indians believe that psychological research has been offered to support the belief of inferiority among minorities and, therefore, they often refuse treatment. In addition, Asian Americans believe problems should be handled within the family and obtaining therapy is discouraged by many Asian American families.

Thus, while there is little data that demonstrates racial or ethnic differences in OCD, it would be shortsighted and irresponsible to conclude that there are no differences or relevant issues related to race or ethnicity. Probably the most telling fact is that there is so little research done on this topic at all. Obviously this is an area that needs further study.

TREATMENT AND PROGNOSIS

OCD has been discussed in the professional and popular literature for centuries. However, OCD was frequently met with therapeutic pessimism, and patients were often un- or under-treated because of the lack of effective therapies. For many years OCD was seen as a basically treatment-resistant condition for which there was little that could be done. It is only in the last three decades that we have seen the development and use of effective psychological and pharmacological treatments.[9]

Fortunately, in recent years, effective treatments have been developed that have provided very good outcomes, and as we mentioned earlier in this chapter, about 70 percent of OCD patients that receive treatment show some degree of improvement in their condition.[1] Typically, a combination of antidepressant medications and cognitive-behavioral psychotherapy (CBT) is recommended. Exposure/response prevention (ERP) techniques are the most widely used CBT methods.[4] March[54] concluded that CBT alone or with pharmacotherapy is effective treatment for OCD in children and adolescents.

Franklin, Abramowitz, Bux, Zoellner, and Feeny[55] looked at treatment results for patients treated with CBT, half of whom were also receiving medication for the condition, while half did not. They found that both treatment groups improved, and that there was no difference between the treatment outcomes for the groups who had CBT with medication or CBT without medication. They thus concluded that OCD can be treated effectively by CBT alone.

Some patients have only obsessions but no compulsions, and these patients have traditionally been difficult to treat. However, Freeston et al.[56] found that CBT was effective with this group of patients as well. Thus, for many OCD patients with both obsessions and compulsions and for those with obsessions alone, CBT is usually seen as the treatment of choice. However, staying in this type of treatment can be difficult for some patients. If patients do continue with this treatment, they can expect sustained improvement. Reid[57] suggested that response prevention that keeps the patient in the situation where they are experiencing anxiety for at least 30 minutes can effectively eliminate compulsive rituals, but he too finds that this is very difficult for some patients to tolerate. Part of the CBT treatment also involves exposure to situations that may be anxiety provoking, and Ito, Marks, de Araujo, and Hemsley[58] found that *in vivo* exposure is usually preferred, and is superior to imaginal techniques. They also reported that the imaginal techniques did not add much to the *in vivo* methods. Further, Franklin et al.[55] also found that CBT was very effective as a treatment, and relied primarily on ERP, but they also determined that attempts to shorten treatment or space out the sessions had a diminished effect on treatment success.

In another study looking at the intensity and timing of treatment,[59] results indicated that both intensive treatment (daily for three weeks) and twice-weekly treatment (for eight weeks) were both effective. There was a moderate trend favoring intensive treatment immediately following therapy, but there was no difference in the treatment groups on follow-up. There was some evidence of relapse with intensive treatment, but not with the twice-weekly group.

While much of the psychotherapy research in the treatment of OCD has focused on CBT, there has been some research looking at the effects of other forms of psychotherapy as well. One study found that cognitive psychotherapy was as effective as exposure in treating OCD.[60] However, other research suggested that cognitive therapy alone is not usually effective nor does it add much to other psychological or medical therapies. Most authors agree that the primary role of dynamic and supportive psychotherapy is limited to consolidating gains from other treatment methods, helping with compliance with treatment, and helping with the treatment of comorbid conditions.[73] Thus, it seems clear that CBT is the preferred form of psychological treatment for OCD, and that other types of psychotherapy (e.g., cognitive or psychodynamic) might be secondary or supportive, but should rarely be the treatment of first choice for this condition.

Some of the early breakthroughs in the treatment of OCD came from the discovery of therapeutic efficacy of certain of the antidepressant medications. Today, the drugs of choice are the selective serotonin reuptake inhibitors (SSRIs), clomipramine (Anafranil), and newer antidepressants.[57] Clomipramine was the first OCD-specific medication, and has been the treatment of choice for many providers. This drug is a tricyclic antidepressant, but unlike the other tricyclics, it is a potent serotonin reuptake inhibitor as well. It has also been found that the other tricyclic drugs had little effect on OCD. The benzodiazepines (Valium, Xanax, Klonipin, Ativan, etc.) were used for many years in the absence of other more effective drugs, and their antianxiety effects might have had some minimal benefit, but they have largely been replaced by the newer and more effective drugs and are rarely the drugs of first choice for the treatment of OCD any longer.[57]

Other drugs have been found to be helpful adjunctive therapies for treatment-refractory OCD patients. For example, potent neuroleptics in low doses, clonazepam, and the monoamine oxidase inhibitors are common choices for this purpose.[57] Olanzapine (Zyprexa) was found by Petrikis, Andreou, Bozikas, and Karavatos[61] to be helpful in treating OCD patients who had comorbid bipolar disorder. Shapira et al.[62] also found that olanzapine was helpful in treating some OCD patients who did not respond to other medications. Reid[57] pointed out that some medications can decrease compulsions and anxiety in behavioral programs, but other drugs like the benzodiazepines can

actually interfere with the learning and the conditioning process with CBT. Thus, while medications might be helpful with some patients, there are some (specifically the antianxiety drugs) that might actually interfere with treatment. This, of course, suggests that in order to treat this condition, the patient probably needs to be in touch with at least some of the anxiety that is generated by the treatment methods or the anxiety response will not extinguish.

In sum, about 60 percent of patients will respond favorably to an adequate dose of SSRI medication or clomipramine within about nine–ten weeks.[63] As Rivas-Vasquez[64] pointed out, SSRIs and atypical antidepressants have equal or superior efficacy and a better side effect profile than their predecessors, but they are not without their side effects. The most common for these drugs are nausea, diarrhea, insomnia, headaches, sexual dysfunction, sedation, and weight gain. Maxmen and Ward[4] also concur that the SSRIs and clomipramine are the first-line treatments today, and point out that they may need higher dosage levels than used for other disorders. They report that about 70 percent of patients will receive some benefit, but also suggest that most will have some residual symptoms. Approximately 10–15 percent of patients will have a complete and full remission, and even the partial responders will have about a 40 percent reduction in symptoms. Most OCD patients will need to stay on the medication chronically since 85 percent relapse after a month or two after stopping the medication has been reported. We caution this finding since this study did not include patients who were also receiving CBT.

When taking these medications for the treatment of OCD the typical reasons why they are not effective are that patients terminate the medication prematurely[4] or that the drug is not taken at an adequate dosage level.

In one study done in India,[25] juvenile OCD patients were followed for two–nine years (mean = 5 years); nearly 75 percent of patients were adequately treated with medication. About 21 percent were seen as having clinical OCD on follow-up, and around 48 percent were in true remission. They found that an earlier age at onset was associated with a better course and outcome for the disorder.

As we mentioned earlier, some researchers have related OCD and OCD-like symptoms to PANDAS. Allen, Leonard, and Swedo[18] treated a group of children who fit the PANDAS profile with immunosuppressant drugs. All of the patients in this sample improved with this type of treatment. This is a minority of patients who actually fit the PANDAS profile, and unless they fit the profile and have not responded to another form of treatment, trying something like this would not be a likely first-line treatment because of the risks and side effects. However, this finding is intriguing and suggestive, and may provide some insights into additional treatment methods.

Treatment of OCD during pregnancy must take into account pharmaco-
logical effects of drugs on the development of the fetus.[65] For example, it has
been found that there are several symptoms of withdrawal, including tremors
and seizures, in infants born to women taking clomipramine for OCD. If medi-
cation is necessary, SSRIs are safer than clomipramine for use during preg-
nancy.[45] In addition, the impact of untreated OCD during pregnancy versus
the effects of the drug on the fetus must be weighed when deciding to discon-
tinue medication. OCD can be treated successfully using psychotherapy alone,
and when a mother is breast-feeding, this option should be kept in mind. Anti-
obsessional medications are all secreted in breast milk, although some trans-
fer at higher rates than others. Studies indicate that breast-fed babies become
hyperirritable when the mothers were taking these medications for OCD.[45]
For a more detailed discussion of postpartum depression and its treatment, see
Nydegger, this volume.

For the most severely disabled OCD patients who have not responded to
any other types of treatment, they may be candidates for one of several dif-
ferent types of stereotactic neurosurgery with acceptable to excellent results
in 30–45 percent of the most difficult to treat patients.[57] Researchers[4] found
that 25–30 percent of patients would benefit from a cingulotomy. Baer et al.[66]
found that 28 percent of 18 previously unresponsive OCD patients were vir-
tually symptom free after more than two years, and another 17 percent were
partial responders following a cingulotomy. Hodchkiss, Malizia, Bartlett, and
Bridges[67] found similar results. Baer et al.[66] also report that serious adverse
effects of the surgery are very rare.

These results lend credence to the theories of the etiology and pathology of
OCD. Second, they provide a treatment alternative for those patients who have
a serious and disabling form of OCD and who have not responded to any other
type of therapy. While the success of biological treatments (drugs and surgery
both) may imply some relationship with treatment response, Thienemann and
Koran[68] found no correlation between treatment outcomes and either neuro-
logic soft signs or neuropsychological test results. Also, these successful biolog-
ical treatments do not necessarily indicate a physical etiology for this disorder.
However, it is our belief that OCD may actually be a group of related disorders
with different etiologies and different courses, and that some of the causal fac-
tors may be genetic or neurophysiological, but some of them may be entirely
psychological or environmental.

Adults seek treatment for OCD because they recognize that this disorder is
interfering with their lives. Children, however, don't typically realize that they
have a problem with obsessions and compulsions. Toddlers, preschool, and

early school age children do not have the cognitive capacity to understand the nature of the obsessions or compulsions. Children are often brought to their physician when their parents believe they are exhibiting unacceptable behavior and are having difficulty in school. A major distinction in the *DSM–IV* criteria for children and adults is the criterion of insight. While most, but not all, adults are aware of the illogic and dysfunctional nature of their symptoms, this is rarely true of children.

The treatment of OCD in children is much the same as that for adults, and usually includes medication and CBT.[69] When dealing with children who have OCD, it is important that the disorder be explained to them with consideration of their stage of cognitive development (e.g., concrete operations, formal operations). The child's cognitive development thus necessitates changes in the psychotherapeutic approach that might be used.[70] When children understand the biological basis of OCD, they typically find it easier to externalize the symptoms and to not blame themselves for the disorder. Thus, therapeutic approaches with children must focus on concrete models and concepts.[70]

When discussing treatment, it is important to also discuss the role of the family in OCD. There is no evidence that family problems cause OCD, but clearly they can exacerbate it. More importantly, families can't cure OCD either, but family support and involvement can certainly help the treatment effort. It is important for the family members of an OCD patient to be involved with treatment for many reasons. First, OCD is the type of problem that will affect everyone in the family in one way or another. Thus, family members should get involved and ask questions of the providers as well; they need to understand the disorder and their role in helping. They should also be aware of the fact that negative comments and behaviors can actually make the condition worse by driving it underground and encouraging the patient to hide the symptoms and to deny the need for help.

Family members can also work with clinicians, schools, and so forth, to help implement the types of treatment strategies that will support the goals of therapy. We also encourage family members to find and get involved with support groups to help them deal with the impact of this disorder. Finally, we always strongly recommend that family members, and especially parents, not get so wrapped up in caring for the OCD patient that they neglect their own needs. Taking care of oneself is vitally important in the big picture of managing the impact of OCD on a family.

Prognostically, OCD is usually considered to be a chronic, although sometimes episodic, condition.[57] Thomsen[71] reported that 17 percent of one

pretreatment cohort were receiving psychiatric disability payments as adults, regardless of the age of onset or social background. This certainly suggests that, for many patients, the outcomes of this disorder can affect them throughout their entire adult life. There are, however, findings that do help us understand some of the factors that will impact the outcomes of OCD in different ways. For example, Thomsen[71] found that severe obsessive-compulsive syndromes in childhood or adolescence do predict severe adult problems. Maxmen and Ward[4] pointed out that treatment outcomes are not related to the content of obsessions, and that patients with milder symptoms, no compulsions, a briefer duration of clinical symptoms, and higher premorbid functioning do have a better prognosis. Similarly, researchers also found that age of onset, symptom severity, and symptom duration were all correlated with treatment response.[72]

Hiss, Foa, and Kozak[73] put two groups of patients who had been through a treatment program in one of two post-treatment groups. One group received intensive relapse prevention (RP) and the other received attention control (AC) treatment. While both groups improved immediately after the post-treatment activity, only the RP group maintained the gains over time, and the AC group showed a return of the symptoms for most patients. Thus, in addition to treatment, there is good evidence that a relapse prevention program will probably bolster and consolidate the effects of even the best treatment programs. This fact also will positively impact the findings of the apparent chronicity of OCD, and will help deliver even better treatment outcomes.

SUMMARY

As we have discussed in this chapter, OCD is a complex and complicated disorder that severely impacts the lives of patients and families. The etiological picture is a confusing one because of the findings that suggest a genetic basis for the disorder and/or a neurophysiological cause as well. However, there are other researchers and theorists that hold to a primarily psychological and/or environmental cause for ODD. Clearly there is a physiological component for some patients with OCD, but this is not as clear with other patients. OCD is a complex disorder that may have a number of different variants that probably have different causes and different pathologies as well. As we learn more about this disorder, we will probably find that there are clear and distinct differences between the different types of OCD, and hopefully this will aid in improved treatments and perhaps even prevention of this serious disorder.

The good news for this problem appears to be the development and use of effective treatment methods. As mentioned by March,[74] CBT with or without medication is an effective treatment for children and adolescents. This is also true for adults. We have also found that there is an increasingly large arsenal of effective medications that can be very helpful as well. While there are differences of opinion as to whether medication is a necessary component of treatment, there is little question of the fact that certain medications (e.g., the SSRIs and clomipramine, as well as some newer atypical antidepressants) can be very helpful. Other medications or medical procedures have also proven effective for patients who do not respond to the more conventional treatments. Suffice it to say, the large majority of patients with OCD—children, adolescents, or adults—can be helped with treatment, and the involvement and support of families and the use of response prevention programs can improve these outcomes as well.

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RESOURCES

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Eating Disorders: Anorexia Nervosa, Bulimia Nervosa, and Binge Eating Disorder

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Eating disorders are often glamorized in Hollywood, and attract enormous media attention when they afflict famous people. Well-known examples of celebrities who have suffered from eating disorders include: Karen Carpenter who eventually died from anorexia nervosa (AN), Tracey Gold from TV's *Growing Pains*, and more recently, Mary-Kate Olsen, whose eating disorder landed her on the cover of *People* magazine.[1] In an article titled "Mary-Kate's Private Battle," her battle was private no longer. Despite the intrigue and curiosity that eating disorders emote, they are illnesses that have devastating effects on individuals and their families. They are common conditions often occurring in young women, but eating disorders also occur in young men, and can actually begin at any age. This chapter will review descriptions of eating disorders, and then explore their history to gain a fuller understanding of the evolution of these disorders over time. We will then describe the prevalence of eating disorders, and then discuss some proposed causes, risk factors, and treatments for these disorders. We will end with a discussion of the impact of eating disorders on our society, along with potential new areas of research.

WHAT ARE EATING DISORDERS?

Eating disorders are often variously defined as social, cultural, biological, psychological, medical, psychiatric, or behavioral problems depending on the perspective that is taken. According to the *Diagnostic and Statistical Manual of*

Mental Disorders, Fourth Edition-Text Revision (*DSM–IV–TR*), [2] eating disorders are divided into three main categories consisting of AN, bulimia nervosa (BN), and eating disorder not otherwise specified (EDNOS). The diagnostic symptoms of these disorders are presented in Table 6.1. Generally speaking, AN requires a low body weight, whereas BN affects individuals of normal weight who have eating problems such as binge eating (eating large amounts of food in an uncontrolled way) and purging (vomiting, or using laxatives, or other means). Both disorders involve a restriction in food intake to various degrees, and a preoccupation with shape and weight. In AN, there is a requirement that menstrual cycles have ceased for a period of three months.

The third category, EDNOS, is reserved for those individuals who do not exactly fit into either of the other two diagnostic categories, but still have significant problems pertaining to eating and their thoughts or feelings about weight

Table 6.1
Diagnostic Criteria for Eating Disorders

Anorexia Nervosa (AN)	Bulimia Nervosa (BN)	Eating Disorder Not Otherwise Specified
• Refusal to maintain body weight at or above a minimally normal weight for age and height • Intense fear of gaining weight or becoming fat • Body image disturbance, undue influence of weight or shape on self-evaluation, or denial of the seriousness of the current low body weight • Amenorrhea	• Recurrent episodes of binge eating, characterized by eating a large amount of food, and a sense of lack of control • Compensatory behavior to prevent weight gain (vomiting, laxatives, diuretics, fasting, exercise) • Binge eating and compensatory behaviors both occur about twice a week for 3 months • Self-evaluation is unduly influenced by shape or weight	• All of the criteria for AN are met, except for amenorrhea • All of the criteria for AN are met, except weight that despite significant weight loss, is in the normal range • All of the criteria for BN are met, except for the frequency and/or duration • Regular use of compensatory behavior after eating small amounts of food, when there is a normal body weight • Repeatedly chewing and spitting out food • Binge eating disorder: recurrent episodes of binge eating which are not accompanied by compensatory behaviors
Specifications: Restricting or binge-eating/Purging type	Specifications: Purging or Nonpurging type	

Source: Adapted from the *DSM–IV–TR*[2]

and shape. Often, children and adolescents fit into this category because they have been identified early and do not manifest all of the symptoms required, or they do not meet the duration of illness requirement for certain criteria for the diagnosis of AN (three months of amenorrhea) or BN (three months of binge eating and purging). One type of eating disorder within the EDNOS category has been gaining attention and research interest as a separate disorder. It has been labeled binge eating disorder (BED), and a set of research criteria are presently available in the *DSM–IV–TR*.[2] BED involves binge eating without the compensatory behaviors that are typically seen in BN (vomiting, laxatives, etc.). In order for BED to be diagnosed, the sufferer must experience marked distress about the binge eating, and it must occur on average at least two days per week for a period of six months. In addition, the binge eating must be associated with certain characteristics, such as eating rapidly, eating until uncomfortably full, eating large amounts when not physically hungry, eating alone, and feeling disgusted, depressed, or very guilty afterwards.

In addition to behavioral symptoms, eating disorders have medical complications. Due to the effects of starvation in AN, there can be problems with the heart, bones, and hormonal and fluid systems within the body, just to list a few examples.[3] All muscles, including the heart muscle, can become weakened, causing the heart to beat irregularly or to fail completely. This can be a cause of death in AN. Due to starvation, menstrual cycles stop, and because of this, not enough calcium is deposited into the bones. This can lead to osteoporosis, a condition most often associated with older women who no longer menstruate. Future fertility can also be impacted by these hormonal changes. Fluid systems can be disrupted by dehydration, which can also cause death. Even the brain can be affected by starvation since not enough nutrients are taken in to nourish the brain. Brain scans have shown brain shrinkage during the illness. In children and adolescents, growth can be halted as there are not enough nutrients present to build muscle, bone, and tissue needed for growth. The mortality rate for AN is the highest of all psychiatric illnesses, and death is largely attributed to these medical complications and to suicide.[4]

Anorexia Nervosa

Brittany was 14 years old when her mother became concerned about her significant weight loss and progressively diminishing variety of food choices. Over a period of only six months, Brittany had gone from being a socially active and engaging teenage girl with many friends to isolating herself in her bedroom. She refused to eat meals with the family and focused almost exclusively on homework. She had also taken an interest in running on the treadmill in order to be "more healthy." When Brittany's mother or father would try to

get her to eat more, they were met with much resistance and decided they would just stop nagging her. When she was brought by her mother to see a doctor, Brittany had lost almost 30 pounds and was now about 75 percent of her normal weight. She was feeling faint at times, and had not had a menstrual period in four months. Her hair was falling out of her head, but a fine hair growth had appeared on her back. She was cold a lot of the time. Even though underweight, she told the doctor that she believed she was overweight and needed to lose a few more pounds. Although Brittany's mother was quite concerned about her, Brittany did not see any problem with her current low weight and could not understand why everyone was making such a big deal of it. The doctor did some tests and determined that Brittany's heart rate was very low and that she required admission to the hospital.

For BN, medical complications can be just as severe. These complications arise not due to starvation, but due to binge eating and purging which disrupt the delicate balance of chemicals in the body. For example, levels of potassium and sodium become out of balance. Since the heart relies on these elements to pump blood through the body, this leads to an inability of the heart to regulate its rhythm. As in AN, this can be a cause of death in BN. In addition, there can be severe damage to the teeth and esophagus due to vomiting. Tears can occur in the esophagus causing bleeding that can be very dangerous. Binge eating also has its dangers with the potential to cause the stomach to dilate and even rupture.[3] BED has also been associated with obesity, which has a multitude of medical risks as well, including diabetes, high blood pressure, and heart disease.

Bulimia Nervosa

Allison was 30 years old when she decided she needed help to overcome her eating disorder. Although she had suffered for many years, she was tired of hiding the binge eating and purging from her family. When Allison was a teenager, she was always worried about her weight even though it was average for her height. She began trying to lose weight by trying not to eat during the day. Each day by the evening, she would be ravenously hungry and would eat whatever she could find in the cupboards at home. At times she would eat a whole gallon of ice cream in a short period of time. She would feel very guilty after eating, and would vomit in order to get rid of what she had just consumed. Although her weight did not really change much, Allison continued on with this pattern of eating, on and off, for several years. As she became an adult, she began to have more insight into her pattern of eating, and discovered that fights with her boyfriend appeared to trigger binge eating and purging. She often turned to food to soothe an emotional upset. Allison eventually got married and had children, but found that keeping this secret from her family was very difficult. One day she went for

an appointment to her dentist who noticed that her teeth were deteriorating and asked if Allison had a problem with vomiting. The following week, Allison fainted at work, and when brought to the emergency department, she was told that her potassium was critically low. Allison was treated with intravenous potassium, and at that point, she decided that she needed some professional help for her illness. She also decided that a first step in getting help would be to tell her husband about her long struggle with bulimia.

In terms of the outcome or prognosis of eating disorders, there is still much to learn. Generally, for AN, outcome appears to be good in about 50–70 percent of patients, with the others developing a more chronic illness that lasts many years or leads to death. The course of AN is highly variable, with some individuals recovering fully after a single episode, others experiencing many relapses and remissions, and still others chronically deteriorating over many years.[2] Estimated mortality rates are around 5–10 percent, however, there is an approximate 1 percent of increased mortality risk with each year the illness persists.[2,5] Outcome appears to be better for younger patients, for example, those who receive help for their illness in their teen years. Although many patients with AN recover in terms of weight restoration, enduring preoccupations about food and weight are common. In addition, of those initially diagnosed with AN, up to 40 percent go on to develop bulimic symptoms, and other psychological symptoms can persist including anxiety and depression. We know less about the long term prognosis of BN. The overall success rate for patients receiving treatment is between 50–70 percent, although relapse rates are high (30–50%).[4] Within clinic samples of patients with BN, symptoms appear to persist for at least several years. Often patients are reluctant to seek treatment due to shame and embarrassment, and may go untreated for many years. In any event, both AN and BN carry serious medical complications, and a significant proportion of individuals experience a chronic and debilitating course of illness.

A HISTORICAL VIEW OF ANOREXIA NERVOSA

AN and BN are very different in terms of their history. Agreement exists in the literature that AN was first described clearly by Gull in England and Lasegue in France almost simultaneously in the late 19th century.[6,7] BN first became clearly described a century later, by Russell in 1979.[8] We will first describe the historical significance of AN, and then turn to the more recent evolution of BN.

William Gull first coined the term anorexia nervosa, but Lasegue's description was similar, and he labeled the disorder *l'anorexie hysterique*. In Gull's earliest descriptions, AN involved significant weight loss, slowing of the pulse,

skin changes, and loss of menstruation. He described so-called perversions of the ego as the cause of the disorder. Similarly, Lasegue described the cause as a morbid mental state, and felt that psychological distress was converted into food refusal. Both commented that no physical cause could be found for these illnesses, and Gull advised feeding these patients despite their protests. Interestingly, neither author commented on concerns about body image.

Although agreement exists as to the first clear descriptions of AN by Gull and Lasegue, there is much debate over the presence of earlier cases.[9] Cases of self-starvation have been documented as early as the 5th and 6th centuries, but were attributed to demonic possession and treated with exorcism. Following these cases, self-starvation was documented in accounts of sainthood. In 1380, Saint Catherine of Siena began starving herself at age 16 and died in her early thirties. At the time of her death she was refusing food and water. Saint Catherine believed she could not eat, and prayed that God would help her. In the 1700s, Saint Veronica was also afflicted at age 18 (perhaps even earlier, at age 15), and is documented to have been in a competition to show that she loved God the most. Saint Veronica was often seen by other nuns sneaking into the kitchen to binge on large amounts of food. She was treated in the infirmary by force-feeding, and ultimately recovered, living until the age of 67. Bell[10] reviewed the lives of 271 saints who lived in Italy from 1200 A.D., and deemed that about one-third of them suffered from holy anorexia. This condition involved food refusal and emaciation which was motivated by the belief that one possessed the ability to live without food, and thus reflected divine intervention. In the 17th and 18th centuries, several girls between the ages of 14 and 20 were labeled miraculous maids, engaging in self-starvation, and modeling themselves on saints. And, in the 18th–19th centuries, cases of so-called fasting girls are documented. These girls abruptly refused to eat, and drew much attention and fame. At this point, psychiatrists began attributing these disorders to a nervous condition rather than a religious or divine miracle.

Much of the disagreement surrounding the diagnosis of these earlier cases comes about from the unknown motivation behind the self-starvation. Those who do not believe that these early cases are cases of AN point to the lack of weight or shape concerns present in these individuals which would be necessary to meet the diagnostic criteria in the *DSM–IV–TR*. However, it is unclear from the documentation whether these concerns were present. Others would say that religious preoccupations do not preclude the presence of body image concerns, and that these may indeed be the earliest cases of AN. Strength is added to this position by looking at different cultural expressions of AN. A recent study from Hong Kong found that in 70 cases of AN, 59 percent did not describe any weight concerns, reporting digestive discomfort as the most

common reason for being unable to eat.[11] This suggests that cultural factors may bring about body image concerns, but that these concerns are not necessary for induction of self-starvation or for a broader definition of AN. Keel and Klump[12] point out that the uniting factor between fasting saints and modern day AN is the paradox that the starvation is *both* deliberate *and* nonvolitional, meaning that the process may initially be self-initiated, or even maintained, but there is also an inability to stop the behavior. This differentiates AN from other processes of deliberate self-starvation, such as in a protest situation in which individuals are able to return to eating once the protest is over.

A HISTORICAL VIEW OF BULIMIA NERVOSA

In contrast to the long history of AN, BN has only recently been recognized as a diagnosis. Many contend it is not just a new diagnosis, but is truly a new disorder.[13] It was first called "bulimia" in the *DSM–III*[14] in 1980, but this description only included binge eating. In 1987 in the *DSM–III–R*,[15] it acquired the name "bulimia nervosa," and required binge eating and vomiting or other compensatory behavior to be present for the diagnosis. In ancient Egypt, Rome, Greece, and Arabia, there are reports of induced vomiting in order to cleanse the body, and by the 17th century, purgation was a popular remedy prescribed by physicians. There are famous stories about the vomitorium in ancient Rome where people used emetics (chemicals ingested to cause vomiting) in order to eat more. However, these ancient accounts were not likely to be the first cases of BN, as there is no evidence of a desire for a thin body shape, and the purpose of the vomiting is well described as improving health, or increasing intake, not for purposes of weight loss. Russell[13] also describes cases of bulimic behavior in several saints, but states that these more likely fit a picture of AN associated with some binge eating and purging, rather than BN. There are a few questionable cases that might be considered to be BN from the early 20th century, but most reliable descriptions of BN appear during the 1970s in which Russell compiled a series of 30 patients who exhibited binge eating, along with vomiting and an intense fear of becoming fat.[8]

Therefore, it appears that overeating or binge eating has existed since antiquity, but the disorder BN was identified in the 1970s. It is possible that BN existed before, but was never identified. However, Russell believes that cases must have been much fewer in number prior to the 1970s, and that the first cases occurred between the 1940s and 1960s.[13] The identification of BN in the 1970s provides a partial explanation for its relatively recent rise in prevalence, as does a recent emphasis on the thin body ideal in our society which is thought to be a potential cause of the illness. BN was initially described as

being closely associated with AN, but has become a more distinctive disorder over time with studies of personality traits demonstrating a very different type of person that develops BN (more impulsive, extroverted, and emotional) compared to one who develops AN (obsessive, introverted, perfectionistic).

HOW COMMON ARE EATING DISORDERS AND IS THE PREVALENCE OF EATING DISORDERS INCREASING?

Both AN and BN are much more common in females compared to males, with over 90 percent of cases occurring in women for both disorders. AN typically begins in mid- to late adolescence (14 to 18 years of age), and although it may onset at potentially any age, it rarely has an onset in women over 40 years of age.[2] The average prevalence rate for AN is 0.3 to 0.5 percent for young females, and the incidence rate (number of new cases per year) is at least 8 per 100,000 people per year.[2,16] There has been much debate over whether the incidence and prevalence of AN is increasing. In their review, Hoek and van Hoeken[16] state that the incidence rate of AN in 15- to 24-year-old females definitely increased over the past century, until the 1970s. In their extensive and careful review, Keel and Klump[12] suggest a modest increase in incidence in AN, after controlling for factors such as population size changes, female proportion of the population, and method of ascertainment of diagnosis.

BN has a slightly later age of onset compared to AN, first occurring in late adolescence or early adulthood. The prevalence rate for BN is 1–3 percent, and the incidence rate is at least 12 per 100,000 people per year.[2,16] Keel and Klump[12] found that BN has been dramatically increasing in incidence since 1970, and concluded that there are actually no reports of BN prior to 1960. However, there is always a possibility that BN existed prior to 1960 in a hidden form of illness. In terms of the prevalence of the eating disorders in other areas of the world, AN appears to be just as prevalent in Western and non-Western nations, if the criterion of weight concerns is not required.[12] However, cases of BN appear only to occur in individuals who have had some kind of exposure to Western ideals. As a result of this, Keel and Klump[12] postulate that there may be an association between Westernization, body image disturbance, and BN, and concluded that AN does not appear to be a culture-bound syndrome, but that weight concerns and BN may be culturally bound phenomena.

BED is different from AN and BN in that the ratio of affected males to females is more equal. Compared to ratios of nine females for each male affected in AN and BN, about one and one-half females are affected for every male in BED. The overall prevalence in community samples ranges between 0.7 percent and 4 percent, however in samples of the population drawn from weight loss

programs, 15 to 50 percent meet criteria for BED.[2] The illness often begins in late adolescence or early adulthood after significant weight loss from dieting, and appears to have a chronic course.

WHY ARE WOMEN MORE COMMONLY AFFECTED? DO EATING DISORDERS AFFECT MEN TOO?

It is unclear why women are more commonly affected by eating disorders than men. It has been postulated that there is more media attention devoted to the thin female ideal and that this exerts societal pressure for women to diet and rebel against their natural body weight. In more recent years, the ideal body shape for men has also changed, with more pressure for men to bulk up. Male action figure dimensions have changed over the past 30 years, becoming increasingly muscular beyond that which is humanly possible.[17] In addition, men's magazines often focus on gaining muscle mass and shaping up.

Whatever the media pressure, it is clear that eating disorders affect males too. Often the same types of symptoms are present in males with eating disorders as females. There can be some subtle differences. Boys are more likely to exercise than diet as compared with girls. In addition, their reasons for wanting to lose weight may be different from girls, as boys often begin dieting because they are overweight, or they want to avoid medical complications of obesity that affected their parent, or they want to improve sports performance.[18] Boys want to increase their upper torso while also getting rid of fat.[19] It has been suggested that there is a higher rate of eating disorders in males who express a homosexual or bisexual orientation, but the data available are not conclusive[20] Males with AN appear to have similar outcomes compared to girls with AN, although they require a substantially greater number of calories to gain weight. In addition, males with AN can experience the same medical complications as girls, with similar degrees of osteopenia and brain shrinkage. For males with BN, very little is known about their response to treatment or outcome. It is possible that fewer boys with BN seek treatment compared to girls, perhaps due to greater shame and feelings of isolation. But, there is some evidence that the number of boys seeking treatment for eating disorders is increasing in more recent years.[21]

WHAT ARE SOME CAUSES AND RISK FACTORS FOR EATING DISORDERS?

There has been much debate over the causes of eating disorders with many theories proposed, including: dysfunctional families, the media's emphasis on appearance and the thin ideal, low self-esteem, depression, and anxiety, to name

just a few. The bottom line is that we do not know what causes eating disorders. However, researchers have been studying risk factors, which are factors associated with the illness that are present before the illness develops, in an effort to determine some potential causes of eating disorders. It is very difficult to prove that a factor causes a disorder due to the scientific rigor needed to prove causation, thus it is more prudent to discuss risk factors in eating disorders. In order to be labeled a risk factor, the characteristic in question must be present before the illness develops and the study must be conducted in such a fashion that people are studied longitudinally, over long periods of time, even before they have developed the illness. This is often hard to examine in research studies because patients only come to the attention of researchers once they are already ill. In order to be certain about the timing of risk factors, longitudinal studies that begin to study subjects before they are ill are essential. However, these studies are very costly as they require researchers to study large groups of the population over a period of several years or decades in order to capture a few individuals who eventually develop eating disorders. Some factors are fixed, however, in that we can assume they were present before the illness. An example of a fixed factor would be gender. If a factor has not been studied in a longitudinal way (before the illness), but is studied at the time the patient is already ill, and factors are reported on by the patient or family to have occurred in the past or present, the factor would be labeled as a correlate of the disorder rather than a risk factor.[22]

In a thorough review of the literature by Jacobi, Hayward, de Zwaan, Kraemer, and Agras,[2,20] several risk factors for eating disorders were described. They report that gender is one of the most significant risk factors for eating disorders given that there is a much higher prevalence of eating disorders in females compared to males. This ratio is estimated to be 9–10:1, with 9–10 females diagnosed with either AN or BN (the ratio is the same for both disorders) for every male. This ratio appears to be consistent in almost all studies looking at the prevalence of eating disorders, adding certainty to the claim that gender is a risk factor. Age appears to be another risk factor as the peak incidence of eating disorders is in adolescence and young adulthood. As in the case of gender, this finding is consistent across studies, and both age and gender are considered nonspecific risk factors because adolescence/young adulthood and female gender are also related to other psychiatric disorders including mood and anxiety disorders.

In terms of ethnicity, there are conflicting theories. Caucasian females were historically thought to be more at risk for eating disorders compared to other ethnic groups, but more recent studies have suggested that Hispanics have equal rates of eating disturbances, and Native Americans have higher rates,

with blacks and Asians having lower rates. There is also some evidence that blacks in the United States have higher rates of binge eating behavior than Caucasians. Thus, the issue of ethnicity as a risk factor is a complex one, and simple conclusions cannot be made as of yet.[22] Similarly, acculturation has not been well-studied. It is thought that those who are more acculturated to Western cultures have more eating disturbances, as do those in more industrialized countries. Keel and Klump[12] present an argument in their review that rates of BN appear to be influenced by proximity to Western culture, whereas rates of AN do not vary according to cultural milieu. This suggests that BN is a culture-bound syndrome whereas AN is not. They add support to their argument by outlining the historical stability of AN throughout time, and the more recent emergence of BN with the heightening of media attention to the thin ideal. More evidence of the effect of the media on eating disorder symptoms was obtained in a naturalistic experiment in Fiji.[23] On this rather isolated island which has a very low prevalence of eating disorders, Becker, Burwell, Gilman, Herzog, and Hamburg[23] reported that after the introduction of television in 1995 the percentage of the population scoring in the high range on a psychological measure of disturbed eating attitudes was significantly increased. In addition, the percentage reporting self-induced vomiting to control weight was significantly higher. There was no evidence of anyone having AN, and rates of binge eating were no different. This study provided some evidence that television could have an impact on eating-related attitudes and behaviors, particularly in the domain of BN.

Dieting has long been associated with the development of eating disturbances and disorders. The evidence behind this theory comes from two sources. The first line of evidence is that patients who seek treatment for an eating disorder often report that dieting preceded the onset of their disorder, and the second comes from laboratory studies in which imposed dieting and restrained eating were related to the development of binge eating behavior. The relationship between dieting and eating disorders appears to be the strongest for people who binge eat, so this would include those with BN, BED, and AN binge-eating/purging type. The relationship is not as strong for those with AN restricting type. Of course, those who diet can be assumed to have weight or shape concerns that predate the onset of dieting, so perhaps weight and shape concerns and negative feelings about one's body are actually the true precursors to eating disorders rather than dieting itself. But, this would not explain the laboratory findings of imposed dieting leading to binge eating. In any case, considered altogether, weight concerns, negative body image, and dieting seem to be very strong and specific risk factors for eating disorders.[22] Childhood obesity and parental obesity appear to be specifically correlated

with eating disorders, as are childhood feeding difficulties and digestive problems. It appears that childhood and parental obesity are more related to BN and binge eating, whereas picky eating is related to subsequent anorexic symptoms. Teasing by peers that is weight-related has been thought to increase the risk for eating disorders, however, this requires more study. It was once thought that certain types of athletes such as gymnasts, swimmers, jockeys, wrestlers, and dancers were at increased risk. Due to a lack of longitudinal studies, these sports cannot be labeled risk factors, however they do appear to be correlated with subclinical eating disorder symptoms. The evidence is not as strong for full syndrome eating disorders.

Disturbances in emotionality and general psychological problems have also been associated with the development of eating disorders. Disorders in mood, such as depression, have thought to be an underlying cause of BN in particular, whereas obsessive-compulsive disorders (OCDs) have been thought to underlie AN. However, it is often very difficult to determine whether these psychological problems existed prior to the onset of the eating disorder, or are current manifestations of the eating disturbance. An important study in distinguishing cause from effect was that done in 1950 by Ancel Keys.[24] This researcher and his colleagues studied 36 men who volunteered for a "starvation study" rather than perform military duties. For the first three months of the study the men were allowed to eat normally, and for the following six months they were restricted to 50 percent of their usual caloric intake. What these researchers observed was that in the state of starvation, these men developed increases in food preoccupations, and could not concentrate on their usual activities. They would talk about food, read about food, and daydream about food. Many developed an interest in cookbooks, and menus. They also developed odd eating behaviors, cutting up food into tiny pieces, prolonging their meals into two hour affairs, and gaining pleasure from watching others eat. Several developed binge eating if allowed access to food, periods in which their eating was out of control, and large quantities were eaten. There were also personality changes with increases in irritability, anger, depression, and even elation at times. Many became more obsessive, hoarding recipes, cookbooks, kitchen utensils, and even some items not related to food such as books and clothes. All of these behaviors are often seen in individuals with AN, and this study suggests that they may be consequences of starvation rather than causes of the disorder.

Given the requirement that the psychological disturbance was present before the eating disorder, it does appear that obsessive-compulsive personality disorder occurs more frequently in patients with AN compared to healthy people. In addition, psychiatric illness appears to be a nonspecific risk factor for eating disorders. A similar role has been found for prior sexual abuse. The

rates of past sexual abuse appears to be similar in groups with eating disorders when compared to patients with other psychiatric illnesses.[22] Due to the nature of the studies done, past sexual abuse has been correlated with eating disorders, but cannot be called a risk factor since longitudinal studies have not been completed. A similar situation exists for adverse life events (e.g., death of a loved one) which appear to be correlated with psychiatric illness in general. There is also some evidence from longitudinal studies that low self-esteem can precede the onset of an eating disorder and thus low self-esteem can be classified as a risk factor, but more research needs to be done in order to determine its specificity to eating disorders. Perfectionistic traits also appear to be correlated with eating disorders.

Historically, family dysfunction has been targeted as a cause of eating disorders. Families have been described as having poor structure and boundaries, being too close, too critical and conflictual, or too chaotic. However, in many of these studies, the timing of the family dysfunction in relation to the onset of the eating disorder has not been considered. It is now thought that these familial patterns of behavior might be a consequence of the presence of the illness rather than a cause. There are currently no longitudinal studies to determine the role of families as risk factors for eating disorders, and until these studies are completed, family dysfunction can be considered to be related to eating disorders, just as family dysfunction is related to many other types of chronic illnesses.[22] In addition, there is some evidence that rates of eating disorders, mood disorders, and anxiety disorders are higher in relatives of people with eating disorders;, however, the timing of onset of these disorders has not been well-delineated, and these disorders might have emerged in the relative after the target patient was identified as having an eating disorder.

Biological factors may also be important in predisposing an individual to eating disorders. Although no genes have been identified as causative factors for eating disorders, it is thought that genetic vulnerability interacts with factors in the environment to culminate in an eating disorder. It is also thought that not only one gene is involved, but that many genes contribute to the development of an eating disorder. We know that genes must be important in contributing to eating disorders because rates of eating disorders are higher in identical twins than in fraternal twins. Since identical twins share all of their genetic information and fraternal twins only share half, we would expect identical twins to have higher rates of eating disorders if genetics were important, and this is the case in AN and BN. However, the degree of importance of genetics is not yet clear. For AN, the genetic contribution to the illness ranges between 58 percent and 88 percent, whereas in BN it ranges from 28 percent to 83 percent in various studies.[22] A chemical found within the brain called

serotonin has also been implicated as a potential causal factor in eating disorders. Serotonin abnormalities have been found in those patients currently ill with AN and BN, and in those recovered from these illnesses. However, the time precedence of the serotonin abnormality has not been established, and it still remains unclear whether a serotonin abnormality was present before the illness developed. Other possible biological factors include preterm birth and pregnancy complications. Preterm birth appears to be associated with AN, and pregnancy complications with both AN and BN.[22]

From this discussion on risk factors it is clear that much more research needs to be done in this area. Many factors can only be considered to be correlated with eating disorders because longitudinal studies have not been completed. It appears that the evidence for age and gender as risk factors is the strongest, although these factors are nonspecific. In addition, weight concerns and dieting have an evidence base to support them as strong and specific risk factors for eating disorders. Due to the difficulties inherent in longitudinal risk factor research, it may be a long time before we know what risk factors are important in the development of eating disorders, and even longer before we know what actually causes these disorders.

WHAT TREATMENTS ARE CURRENTLY AVAILABLE AND EFFECTIVE?

One of the difficulties in treating individuals with eating disorders is that very little research has been conducted, and there is only a small evidence base of treatment studies. Generally, there are two broad types of treatments that can be used: talking therapy, otherwise known as psychotherapy, and medication treatment, otherwise known as pharmacotherapy. There are also different types of settings in which these treatments are delivered: inpatient (in the hospital), outpatient (outside the hospital), and day treatment (partial hospitalization). In addition to the psychiatric aspect of treatment which will be discussed below, there is also a need for medical monitoring by a general practitioner, pediatrician, or other type of medical doctor experienced in the treatment of eating disorders. Some patients may also opt to see a nutritionist, although the evidence base for nutritional counseling is sparse. The largest role for nutritional counseling is likely in the inpatient setting. There are several sets of guidelines that help professionals in making treatment decisions, two examples of these are the Practice Guidelines for the Treatment of Patients with Eating Disorders (revision) developed in the United States,[4] and the National Institute for Clinical Excellence Guidelines developed in the United Kingdom.[25]

For adults with AN, there is actually very little data from randomized controlled trials (the most rigorous kind of clinical research) that provide clear support for any effective treatment. There is a slightly larger evidence base for treating adolescents with AN. A major problem in doing research on this population of patients is that dropout rates and treatment noncompliance are quite high. Another obstacle to research on AN is that the disorder is relatively rare, and thus it is difficult to gather a large enough group of patients at one research centre. In addition, there can be medical complications that result in patients being withdrawn from treatment studies.[26]

There is some evidence that specific types of psychotherapy can be effective in producing significantly greater amounts of weight gain when compared to routine treatment for adults with AN.[27] These types of therapy shown to be effective by Dare, Eisler, Russell, Treasure, and Doge[27] are: (1) focal psychoanalytic psychotherapy which is a nondirective therapy addressing the conscious and unconscious meaning of the eating disorder symptoms, and the effects of the symptoms in relationships with others including the therapist, and (2) family therapy in which the eating disorder is recognized as affecting all family members, and the focus is on eliminating the eating disorder from its controlling role in the family. However, at the end of one year of treatment, only one-third of the adults in this study no longer met the criteria for AN, indicating that a significant proportion were still ill even after treatment with the specialized therapies. There is also some data to suggest that cognitive behavior therapy (CBT) may be marginally helpful in those who have had AN, but are now at a normal weight. This therapy aims to challenge distorted beliefs about weight and shape, modify negative thoughts and dysfunctional assumptions, and establish healthy eating behavior in patients with AN. When compared to those receiving nutritional counseling, those receiving CBT remained in treatment significantly longer without relapsing.[29] Dropout and relapse rates were significantly higher in the nutritional counseling group compared to the CBT group (73% vs. 22%). A recent randomized trial compared CBT alone, tfluoxetine alone, and the combination of the two in patients who had met the criteria for AN within the prior 12 months.[26] Only 37 percent of those randomly assigned to treatment actually completed the study, with completion rates of 27 percent in the medication alone group, 43 percent in the CBT alone group, and 38 percent in the combination group. The authors concluded that medication alone cannot be an effective treatment for AN given that the majority of patients do not find this treatment acceptable.

In contrast to studies involving adults, studies involving adolescents with AN are slightly more encouraging. Russell, Szmukler, Dare, and Eisler[30] found that adolescents who had been ill for less than three years with AN

gained more weight with family therapy than with individual therapy. These benefits of family therapy were still apparent at the five-year follow-up point.[31] The type of family therapy used in this study, called Maudsley family therapy or family-based treatment,[32] views the parents as capable of refeeding their affected child and it also involves the siblings. This therapy goes against prior psychotherapeutic views of AN in which parents were viewed as too control-ling and pathological, but instead views the parents as the best resource for the ill child. The evidence base for family-based treatment for children and adoles-cents with AN is definitely growing, and this type of treatment has now been shown to be effective in several studies.[33,34] There is also one type of individual treatment that focuses on improving self-esteem and self-confidence that has been shown to be effective for adolescents with AN in one small study.[33]

In terms of medication treatment for AN, no rigorous clinical studies have shown medication to be of benefit in the acutely ill phase of AN. One study found that an antidepressant drug called fluoxetine appeared to be effective in maintaining weight once patients were already weight-restored.[35] Those who remained on fluoxetine for one year did better in terms of weight and symptoms of depression, anxiety, obsessions and compulsions, and core eating disorder symptoms compared to those who did not complete the year of treatment and compared to those who were on placebo. However, this was a very small study and the dropout rates were extremely high (6/16 in the fluoxetine group, and 16/19 in the placebo group) making the interpretation of the results quite difficult. No other medications have clearly shown a benefit in treating AN in controlled clinical trials. Some of the newer antipsychotics, such as olanzapine and risperidone have demonstrated weight gain in some preliminary reports. Medications should not be used as the primary treatment for AN given the lack of evidence and high nonacceptance rate, and are usually only used to treat other illnesses co-occurring with AN, such as OCD or major depression. Fluoxetine for preventing relapse and the newer antipsychotics for the acute phase of AN may prove to be helpful, but definitive studies are currently lack-ing. In terms of the treatment setting, guidelines suggest that management of patients with AN should be attempted on an outpatient basis unless there is medical instability necessitating admission to hospital.

For patients suffering from BN, the first line of treatment with the most evidence is outpatient psychotherapy, with CBT specifically modified for patients with BN.[36] Another type of psychotherapy called interpersonal psy-chotherapy (IPT) has also been shown to be effective in patients with BN, but it may take longer to notice beneficial effects compared to CBT.[37] Whereas CBT focuses on cognitions or thoughts related to binge eating and purging, IPT focuses on relationships and feelings and their association with the eating

disorder. In addition to the confirmation of CBT and IPT as treatments of choice for BN, a recent review also concluded that self-help approaches that used CBT manuals were promising and merit further study.[38]

In terms of medication for BN, many studies have confirmed that antidepressants reduce binge frequency.[39,40] The Food and Drug Administration has approved the antidepressant fluoxetine for treating BN, as it has the most evidence for reducing the frequency of binge eating.[41] One antidepressant (bupropion) is contraindicated for treating BN due to the increased risk of seizures. In terms of treatment setting, the vast majority of patients with BN can be treated on an outpatient basis, but hospitalization might be necessary if patients become suicidal or if medical complications arise. There are no treatment studies involving adolescents with BN, but preliminary literature has been published on adapting family treatment typically used for AN to adolescents with BN.[42] In addition, there are some preliminary studies examining a modified version of CBT for adolescent patients with BN so that it is appropriate for their developmental level.[43–45]

The most effective treatments for BED are similar to those effective for BN. CBT and IPT have been modified for BED and have been found to be effective.[46] CBT generally has the most evidence to support its use, and CBT-based self-help manuals may be even more effective in those suffering from BED compared to those with BN.[38] IPT is also recommended as an alternate treatment for BED.[25] Another type of psychotherapy called dialectical behavior therapy (DBT) modified for BED has been shown to be effective as well.[47] It teaches patients a variety of skills focusing on mindful meditation, distress tolerance, and emotion regulation. Although there are no large studies of these therapies involving children and adolescents, guidelines suggest that these psychotherapies should be offered to this population.

In terms of medication for BED, three major classes have been studied: antidepressants, antiobesity drugs, and anticonvulsant drugs. The antidepressants, including the selective serotonin reuptake inhibitors (SSRIs) such as fluoxetine, have been shown to be effective in reducing binge eating in patients with BED.[48] Several randomized controlled trials (RCTs) have confirmed the efficacy of several different SSRIs in this regard. The drug sibutramine demonstrated reduction of binge frequency and weight loss in obese patients with BED in an RCT, and the anticonvulsant topiramate produced similar results, also in rigorous clinical trials. Although all of these drugs appear to be effective in treating BED, the SSRIs are easy to administer and have fewer side effects than the other drugs, making them the first-line treatment in terms of medication for BED. These medications have not been studied in children and adolescents with BED, and trials are needed.

WHAT ARE THE COSTS OF EATING DISORDERS TO INDIVIDUALS, FAMILIES, AND SOCIETY?

The comprehensive costs of eating disorders to individuals, families, and society are difficult to summarize as costs are not just captured by the monetary cost of treatment, but also encompass the years of productive life lost and the burden of illness to individuals and their families. In terms of treatment costs, AN is just as costly or even more costly when compared with schizophrenia. This is largely attributable to the use of hospitalization. In terms of societal burden, there is the cost to the health care system of hospitalization, along with medical and psychiatric care. There is also the loss of productive years of life when patients are too ill to work or study and from the elevated rates of premature death. With the advent of managed care in the United States and the lack of empirically supported treatments for AN, treatment coverage has become difficult.[49] This increases the financial and emotional burden on families already struggling to manage.

In addition to the medical and psychiatric morbidity that individuals with eating disorders face, there are social and vocational consequences as well for those chronically affected by eating disorders.[50] Social isolation, with dependent relationships on family members, are common in these chronic illnesses, as are limited friendships, decreased probability of marriage, and problems with sexual fulfillment. The isolation produced by eating disorders, particularly AN, in the critical developmental stages of adolescence can result in delays in development of social skills, identity formation, and autonomy. In terms of long-term outcome, many former eating-disordered patients do not reach vocational expectations given their abilities and background. Although there has been limited research on quality of life in eating disorders, it is likely to be reduced in many areas in those suffering from chronic eating disorders.

In terms of the burden of illness on family members, it is great. Very few normal family functions remain after living with an eating-disordered person for a year or more.[51] Mealtimes often become a battleground filled with tension and conflict. Usual family routines and roles become disrupted, and individual roles within the family are disorganized. Siblings are also affected, and are often confused, distressed, and resentful of the attention devoted to their ill brother or sister. The family's social life often stops, as parents are filled with shame and guilt about their potential role in causing the illness. Parents may feel completely isolated and alone, and may delay treatment due to their shame of having a child suffering from a mental illness and their imagined role in causing it. More research needs to be done on how to help families in seeking treatment earlier in the course of these illnesses and in supporting them once treatment is initiated.

WHERE IS RESEARCH ON EATING DISORDERS HEADED?

Much more research is needed in the field of eating disorders. We currently know little about the causes of eating disorders. Longitudinal studies might aid in answering these questions, however they are expensive to carry out and likely will not change the evolution of these disorders as many risk factors are not modifiable. Much of the research currently being done with patients with eating disorders is focusing on possible genetic links by studying families with two or more patients with eating disorders. It is hoped that common genes can be found. In addition, imaging studies looking at the structure and function of the brains of ill and recovered patients is providing new information about the neurochemistry involved in eating disorders. Although these studies are important, as with research on risk factors, genetic and biological factors are likely to be nonspecific and not modifiable. Studies trying to prevent eating disorders may not be the most helpful either, as we cannot predict who might develop an eating disorder, and we do not yet know enough about how to prevent eating disorders.

Studies focusing on those already ill within the early stages of the illness in adolescence appear most promising. When the illness becomes more chronic in adulthood, treatment compliance is even more problematic and prognosis is poor. Our best chance of intervention appears to be in adolescence when the illness is developing and parents can have more of an impact in getting their child help. In addition, studies targeting adolescents with eating disorders are most needed because early intervention is thought to be important in modifying the course of the illness and improving prognosis. Currently, studies on adolescent patients with eating disorders are scarce. More clinical trials studying medications and psychotherapy would be most helpful in determining effective treatments for AN, BN, and BED. These studies all cost money to complete, and in order for researchers to carry them out, the government must be willing to provide funding for eating disorders research. Public pressure on government can make a difference. Often patients themselves, or family members of patients, are critical in persuading government agencies to fund research on eating disorders.

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Body Dysmorphic Disorder: When Does Concern about Appearance Become Pathological?

Shauna L. Shapiro and Angela Gavin

To varying degrees, most people spend time attending to their appearance. Many are concerned with their level of physical attractiveness. However, for some, this normal concern turns into an extreme fixation and causes tremendous suffering. Body dysmorphic disorder (BDD) is a mental disorder defined as a preoccupation with a perceived defect in one's appearance.[1] The concern over one's perceived defect is markedly excessive, and this preoccupation causes significant distress or impairment in one's functioning.[2] An Italian doctor, Morselli,[2] first coined the term dysmorphophobia in 1886 from *dysmorph*, a Greek word meaning misshapen. It was introduced at this time to describe a pathological concern for one's appearance, and subsequently renamed BDD in 1987 by the American Psychiatric Association classification.[3]

This diagnosis can be traced back to Freud who referred to one of his patients with the classic symptoms of BDD as "wolf man" (p. 67).[4] Freud's patient believed his nose was ugly and avoided all public life and work. Recently, people have referred to BDD as "the distress of imagined ugliness" (p. 688).[6] This label is particularly upsetting to the patient who is genuinely concerned with his/her appearance. The level of shame that accompanies this disorder can be significant, and many overlook the poignant symptoms associated with BDD. This leads to severe under diagnosis of BDD in most clinical settings.[7]

DIAGNOSIS

The *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, Text Revision *(DSM–IV–TR)*[8] classifies BDD as a somatoform disorder. There are two main diagnostic criteria that need to be met in order to receive the diagnosis of BDD. The first is a preoccupation with an imagined defect in appearance. Even when a slight physical anomaly is present, the person's concern is markedly excessive. The second criterion is that the person's preoccupation causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.[8]

To a certain degree, many people, at one time or another, have worried about some aspect of their appearance. For the person with BDD, any external representation of their physical appearance can trigger their obsession and BDD related behaviors and thoughts. Their internal representation of themselves is full of negative cognitions, and this perpetuates the dysmorphic anxiety.[9]

To obtain a diagnosis of BDD, it is assumed that the preoccupation, in one way or another, handicaps their social, school, or occupational life. There are varying degrees of how this disorder can handicap a person. Some may be aware that their perception is skewed, whereas others are firmly convinced a defect exists and can become delusional. Although the degree of insight varies, the skewed perceptions lead to significant negative consequences for persons with BDD.

It is common for someone with BDD to be unemployed, single, or separated. People with BDD are extremely preoccupied with their perceived flaw and find it difficult to control their preoccupation, often feeling self-conscious in the presence of others. A person with BDD frequently believes they are unworthy, undesirable, and unlovable, which leads to further isolation. They often avoid a variety of social and public situations because they are so uncomfortable with themselves, or if they do attend these events, they are accompanied by feelings of anxiety and self-doubt.

Further, the isolation and hopelessness that stem from this disorder often leads to significant depression and even suicide. Arthur and Monnell[10] report that 29 percent of BDD sufferers attempt suicide. The significant number of harmful consequences, including even suicide and death, signals the need for a thorough assessment procedure to diagnosis and treat BDD.

Anthony was a 24-year-old biology graduate student. He had been concerned about his appearance since his freshman year in high school. His greatest concern was his nose. He believed the small bump on his nose caused him to look ugly and disformed. By his senior year, he convinced his parents to give him the money for rhinoplasty. However, after the surgery, he was still dissatisfied

with his nose. He stopped going out with his friends and had difficlty looking people directly in the eyes. Although he continued to be successful in his academic study, his social life dwindled until his only social contact was a weekly dinner with his mother.

ASSESSMENT

Often persons with BDD have felt their concerns are discounted and overlooked. There are several important questions to ask a person when determining if he or she has BDD. An assessment includes an investigation of several different aspects of a person's life. Phillips[11] presents several questions to help diagnose BDD, including the following:

> Are you worried about your appearance in any way? What is your concern? Does this concern preoccupy you? Do you think about it a lot and wish you could worry about it less? If you add up all the time you spend thinking about your appearance each day, how much tome do you think it would be? What effect has this preoccupation with your appearance had on your life? Has it interfered with your job, schoolwork, your relationships or social life, other activities or other aspects of your life? Have your appearance concerns caused you a lot of distress? Have your appearance concerns affected your family and friends? (p. 945)

These questions can be a helpful guide to facilitating both understanding and diagnosis. A thorough assessment is essential and provides a frame of reference when interacting with a person who may have BDD. In addition to asking questions, it is important to observe behavioral clues such as exhibited anxiety or depression, social isolation, self-consciousness, and delusional thoughts. These are all significant features to consider when trying to determine if a person has BDD.

In addition, three measurements have been developed to help with assessment of BDD. These include the Body Dysmorphic Questionnaire, the Body Dysmorphic Disorder Examination, and the Yale-Brown Obsessive-Compulsive Scale Modified for BDD (BDD-YBOCS).[9] All three measures are self-report instruments typically used for research purposes. However, Sarwer [9] suggests that they might be useful in a clinical setting to guide therapy and treatment. With the rise of persons with BDD, health professionals could clearly benefit from having a reliable and valid clinical assessment tool. Thorough assessment and diagnosis will help facilitate the recovery process.

SYMPTOMS

People with BDD commonly engage in a variety of behaviors that have become symptomatic of this disorder. Some camouflage themselves to hide

their perceived defect. This may involve wearing heavy makeup, brushing their hair a certain way, growing a beard, changing their posture, or wearing certain clothes and accessories that conceal any perceived flaws. Behaviors include checking one's appearance either directly or in reflective surface, often referred to as mirror-gazing. Another tendency of persons with BDD is to engage in excessive grooming by removing, cutting, or combing their hair.

Also, it is common for some to pick at their skin to make it smooth or to remove any perceived ugliness. They often compare themselves to models in magazines or television. Some behaviors involve dieting, excessive exercise, and/or weight lifting. In addition, people with BDD often spend excessive amounts of time alone, unwilling to allow others to see their perceived defects. In fact, some persons with BDD become housebound.[11]

BDD and its associated symptoms and behaviors can arise gradually or can involve an abrupt onset of symptoms. Regardless of how quickly the symptoms manifest themselves in the patient's life, it is important to be aware of the range of severity. BDD patients display an extended continuum of symptoms. Some are able to maintain relationships, a job, and a social life, while others fall on the opposite end of the spectrum and are completely incapacitated.[9] No matter the level of severity, it is always crucial to assess for suicidal ideation and to never underestimate the seriousness of BDD.

Jannette is a 21-year-old college student. She spends two hours each morning preparing to go to class. Her routine involves an extensive facial and makeup application to cover the pores of her skin which she believes are excessively large and make her very ugly. In her bathroom are over 50 recent glamour magazines, with photos of beautiful flawless models. She points to their skin, noting that you cannot see any pores, and that the color is even and beautiful. She sighs, "Why is my skin so horrible. . . ." When it is explained that these photos have been airbrushed and these people do not look this flawless in real life, she sighs again and says, "Iwish I could airbrush my face before going out in public."

COMMON CONCERNS

There are several common complaints that emerge regarding the imagined or slight flaws that accompany BDD. The three areas that receive a majority of the complaints are the skin, hair, and nose.[10] Veale[1] asserts the most common area of obsession involves some aspect of the face and/or head. It is common that many of the obsessions concern features of the face or head, such as thinning hair, acne, wrinkles, scars, vascular markings, paleness, redness of the complexion, swelling, facial asymmetry, or the lack of or excessive facial hair. Other

common preoccupations include the shape, size, or some other aspect of the nose, eyes, eyelids, eyebrows, ears, mouth, lips, teeth, jaw, chin, cheeks, or head. Any body part can be an area of concern, such as the breasts, hips, genitals, buttocks, arms, hands, feet, legs, hips, shoulders, spine, or abdomen. Someone with BDD can also obsess over his or her overall body size, body build, or muscularity. This preoccupation can involve a single body part or several body parts. Sometimes their complaint can be vague, such as "saggy eyes," or it can be specific, such as "excessive facial hair."

What transpires is a discrepancy between what they see in the mirror and what an objective observer sees. If they become delusional, they hold a false belief about their appearance despite contradictory evidence. Nearly half of all BDD patients suffer from appearance beliefs that are delusional.[13] Delusional patients can receive both the diagnoses of BDD and delusional disorder.[14] What they view in the mirror, over time, is a construct of these fabricated thoughts and beliefs about their appearance, not the actual reflection. The image they perceive affects their mood, behaviors, and serves to perpetuate the obsessive-compulsive tendencies.

Sarah was a 31-year-old mother of two. She was concerned that her body was covered in cellulite, and that no matter how much she exercised and dieted, it would not go away. She spent significant amounts of money on creams and invested three hours each day to specific toning exercises to reduce her cellulite. She no longer wore shorts or skirts in an attempt to cover her body, and refused to go swimming because she did not want her body exposed. She thought about her cellulite constantly and found it was difficult to concentrate on her children or her husband. She spent the majority of her time online exploring the various new treatments for cellulite. She shared that she woke up each morning and went directly into the bathroom to look in the mirror at her cellulite. She secretly hoped it would be gone each morning, and when she saw it there, she felt the weight of depression envelop her.

PREVALENCE

There has been some controversy regarding how prevalent BDD is in the United States, as no controlled studies have been conducted. It is estimated that 1–2 percent of the U.S. population may suffer from BDD,[6,10,15] and that 6–15 percent of dermatologic and cosmetic surgery patients are afflicted with this disorder.[5,7] An important direction for future research is to accurately assess the pervasiveness of this disorder because it often goes misdiagnosed as obsessive-compulsive disorder (OCD), depression, or other psychological disorders. It is

thought to be underdiagnosed because it is a relatively new disorder in the bible of psychological disorders, the *DSM*, and because people are often reluctant to reveal their concern due to deep feelings of embarrassment or shame.[11]

There is also conflicting information regarding the prevalence of BDD in both males and females. Clinical samples exhibit a fairly even distribution among the sexes,[6] however some researchers argue that BDD is more prevalent in females. No empirical studies have confirmed this. However, there have been noticeable differences in the type of preoccupations that males and females report. Women are more likely to become preoccupied with their breasts, hips, legs, and body size, whereas men report being more concerned with their genitals, height, body hair, and body build.[5]

BDD is so often under or misdiagnosed that it is difficult to assert a common age for its onset. Veale[1] points out that it is common for BDD to go undiagnosed for 10 to 15 years. Even years after the onset of this disorder, it appears that many patients are able to recall an event that triggered their concern with their appearance. Their concerns proceeded to develop into hyper-vigilance around their perceived flaw. Some reports indicate that BDD commonly arises in adolescence or the early twenties; a time when looks are emphasized and people are the most sensitive to appearance-related remarks.[6,9,12,16]

DUAL DIAGNOSIS

Persons with BDD have often have more than one psychological disorder. Due to this frequent comorbidity, psychiatric settings often overlook the diagnosis of BDD and focus on the other psychological disorder.[10] Major depressive disorder (MDD) is the most common disorder associated with BDD. Between 54 percent and 69 percent of patients have a diagnosis of MDD in addition to BDD.[9] However, it is important to note that typically dysmorphic thoughts predate a person's depressed mood, and BDD typically precedes MDD.[9] Therefore, it is important to focus on BDD as its own disorder in need of treatment, instead of focusing only on treating the depression which is often done.

Social phobia is another common condition associated with BDD. Sarwer[9] reports that approximately one-third of BDD patients have been diagnosed with social phobia, defined as a fear of being in social situations. People with BDD have developed an extremely negative view of themselves, which exacerbates their feelings of anxiety and fear of social situations.

Another common comorbid disorder is OCD, which involves disturbing thoughts, images, or impulses (obsessions) that occur over and over again and are often followed by compulsive behavior to alleviate the obsessions. Between 30 percent and 78 percent of persons with BDD are also given a lifetime diagnosis of OCD.[9] Many similarities exist between the two diagnoses. Commonly, BDD

is referred to as an OCD-spectrum disorder because of their overlap.[13,17,18,19,20] In both disorders, persons experience obsessive thoughts and images that are out of their control. The person does not want to have these ideas and finds them disturbing and intrusive. These obsessions skew the way the person sees themselves and the world. It becomes difficult to distinguish what is reality and what is delusional thinking, leaving the patient lost in a sea of confusion and isolation. Both disorders lead to negative consequences, such as harmful behaviors, social isolation, and impairment of work and relationships.

In addition, patients with OCD and BDD present many similarities in age, sex, employment status, areas of impairment, and comorbid disorders. Studies of the brain suggest the dysfunction in the frontal-striatal system found in BDD is also found in OCD.[11] A study by Hanes[21] discovered a similar impairment in the executive functioning of BDD and OCD. Symptoms are also similar, such that patients with OCD and BDD report similarities in their pattern of compulsive behaviors, such as mirror-checking and camouflaging.[22] Despite their comparable features, significant differences clarify the need for separate diagnoses and treatment. Many people who are diagnosed with OCD engage in certain behaviors in order to relieve their anxiety. This is in contrast to a person with BDD who experiences an increase in anxiety when engaging in various rituals. Phillips, Gunderson, Mallya, McElroy, and Carter[23] conducted a BDD-OCD comparison study which revealed numerous differences. Persons with BDD were more likely to have suicidal ideation, to have attempted suicide, and also to be unemployed. They were also less likely to be married.[22] Further, patients diagnosed with BDD reported higher rates of depression, social phobias, and psychotic symptoms. People with BDD had more delusions of reference and poorer insight. Overall, the quality of life of someone with BDD may be worse than someone with OCD. It appears that BDD is not a scientific alternative of OCD.

Although BDD clearly has relationships with other disorders such as social phobia, depression, and OCD, its increasing prevalence demonstrates the necessity for a separate diagnosis.[22] These obvious distinctions are important to mention to reduce the large number of misdiagnoses. Therefore, it is important that we understand BDD in relation to other disorders. Assessing for dual diagnosis informs professionals of the severity of the disorder and how it interferes with general functioning. If it is needed, dual diagnosis can assist the therapeutic process and guide treatment interventions.

ETIOLOGY

There have been multiple factors associated with the etiology of BDD. Unfortunately, the results are inconclusive because there has been limited research

conducted on BDD.[1,17] The specific etiology of BDD remains unknown.[9] It is apparent there is more than one single cause for this disorder. Biology, genetic predisposition, psychological factors, and sociocultural experiences all impact the etiology of this specific disorder.

Veale[1] highlights specific risk factors including: a genetic predisposition; a shy, anxious temperament; people who struggle with perfectionism; childhood adversity, such as teasing or bullying; a history of dermatological or other physical stigmata as an adolescent; and being more aesthetically sensitive. Clearly, our environment and the culture we live in affect our thoughts, behaviors, and frames of reference. We are currently living in a culture obsessed with appearance and physical attractiveness. Turning on the television and picking up a magazine sends us a clear message that physical attractiveness is highly valued. Our cultural standards are constantly becoming more and more difficult and impossible to attain. This leads to unrealistic expectations and significant anxiety derived from trying to meet the current beauty ideal.

Biby[17] suggests that comparison targets are a common source of body dissatisfaction. People compare themselves to airbrushed models and celebrities, and this unrealistic quest sets people up for body image disturbances. It is not surprising that researchers declare the prevalence of this disorder to be increasing as our society places a greater emphasis on appearance. These cultural norms which focus on the value of external appearance and qualities can lead people to have a distorted view of what is important and what leads to happiness.

People begin to link their self-worth and self-esteem to their appearance and become unaware of more intrinsic and internal qualities that are valuable. They begin to equate attractiveness with happiness, status, and attention. This preoccupation with appearance is culturally supported and can develop into obsession and even a mental disorder such as BDD. The media projects specific norms related to appearance about which people strive to attain. Individuals compare themselves to unrealistic standards and perceived norms. People strive to reach unattainable appearance-related goals.

One's previous life experiences can also trigger the onset of BDD. Slaughter and Sun[24] list low self-esteem, critical parents and significant others, early childhood trauma, and unconscious displacement of emotional conflict as predisposing factors for BDD. Another predictor is being teased about appearance or bullied.[17] Family characteristics have also been suggested in the etiology of BDD. For example, those who had unpleasant childhood experiences or dissonant family backgrounds are at greater risk for developing BDD. Also, those who have been physically or sexually assaulted or abused have a greater risk for developing BDD. Such a difficult experience can trigger a person to question his or her self-worth and physical appearance and develop low levels of self-esteem and self-acceptance.[11]

Other factors that may predispose someone to developing BDD are having poor social support and peer relationships, as well as being socially isolated.

In addition, a person's temperaments can predispose him or her to developing BDD. Veale[1] has observed specific temperaments in BDD sufferers: shy, anxious, and perfectionistic. A person who has a tendency towards perfectionism may strive to attain impossible ideals regarding his or her appearance. They place excessive demands on themselves to achieve a certain ideal of perfectionism, and have a heightened perception to every imperfection that may exist. Their quest to be perfect may involve spending excessive time and attention on their appearance. A heightened sensitivity develops as a result of their obsessive nature. Buhlman, McNally, Wilhelm, and Florin[25] say BDD patients are already vulnerable towards being distracted by emotional cues. These perpetual behaviors and thoughts can lead to altered perceptions and ultimately to delusions.

Biology may also account for the development of BDD. Biby[15] suggests possible neurological defects in a person with BDD. Studies have found that there may be temporal lobe disturbance which contributes to a person's distorted thinking process.[17] The positive outcomes of selective serotonin reuptake inhibitors (SSRIs) treatment for persons with BDD leads researchers to speculate that the etiology of BDD could be related to poor regulation and depletion of serotonin. It is unclear whether or not altered levels of serotonin are an indicator or a consequence of the disorder.[24]

TREATMENT

Empirically validated treatment options are limited at this time due to few clinical studies. It is not uncommon for persons with BDD to first seek help from a dermatologist or plastic surgeon. In fact, Veale[1] indicates about 5–15 percent of people who receive cosmetic surgery have BDD. Veale[1] reports that in 82.6 percent of people who sought cosmetic surgery, the symptoms remained or worsened. Surgery is a poor treatment option since most patients with BDD turn to new complaints once the original perceived defect has been removed. Since the patient's perception of him or herself is already skewed, the results of any surgical procedure may range from dissatisfaction to aggression.[4] Fortunately, persons with BDD are not limited to surgical procedures to improve their quality of life.

The two main treatment options that have been researched and studied in BDD are the use of medication, specifically SSRIs, and cognitive-behavioral therapy (CBT). Indeed, treatment studies demonstrate a reduction in the distress and impairment associated with BDD after the use of SSRIs and CBT.[26] The Food and Drug Administration has not officially approved any medications for the treatment of BDD.[14] Yet, available data indicates that persons with

BDD respond best to SSRIs compared to other forms of medication, including non-SSRI antidepressants.[11,12,14]

In response to SSRIs, most patients report a decreased preoccupation with their perceived defect. They also experience a greater ability to control BDD related thoughts and behaviors, and an improvement in their mood, suicidal thinking, and general functioning.[14] Phillips and Rasmussen[27] discovered a remarkable improvement in BDD patients through a controlled study involving treatment with fluoxetine (an SSRI). There was a direct correlation between fluoxetine use and improvements in the overall functioning and quality of life of BDD patients. A mental health subscale revealed positive developments after a 12-week use of fluoxetine.

In addition, Slaughter and Sun[24] highlight the clinical efficacy of SSRIs for the treatment of persons with BDD. Results demonstrated a decreased preoccupation with the perceived flaw, a decrease in compulsive behaviors, improved insight, and improvements in overall functioning. Several studies have noted that higher doses of SSRIs are required for BDD than needed for depression, OCD, or eating disorders. Rather than discontinue the use of SSRIs, it is more effective to increase the dosage or try another type of SSRI medication.[5,14] A doctor must consider the patient's tolerability and preference when increasing the dose of any medication. Usually BDD patients respond within 6–16 weeks to a prescribed SSRI.[14] Phillips[11] recommends the patient use the maximum dose recommended if the previous dose was ineffective and the patient can tolerate the increase. If after 16 weeks there is no response to the SSRI, it is suggested that the medication be changed and another SSRI be given. A doctor should closely monitor a patient because the risk for relapse and suicide increase when switching a medication. Phillips[11] also recommends using the SSRI for a minimum of one year before discontinuing use to decrease the likelihood of relapse. Like many other medications, it is extremely important to slowly taper the patient off of SSRIs. The most important thing to do is to tailor the treatment to each individual patient since so little research has been done on treating BDD with medication.[14]

CBT is a structured form of psychotherapy that involves challenging maladaptive thoughts (cognitions) and increasing the recognition of a link between cognitions, emotions, and behaviors. A treatment plan usually includes techniques such as self-monitoring exposure, cognitive restructuring, and relapse prevention.[9] Self-monitoring involves tracking one's obsessive thoughts throughout the day and noting accompanying emotions and behaviors. Exposure involves exposing the patient to their feared thought or situation and helping them acknowledge, understand, and learn ways to cope with it. Behavioral interventions seek to lessen, and eventually eliminate, the compulsive behaviors

of those with BDD by gradually exposing patients to anxiety-provoking situations that lead to BDD behaviors. Through these experiences, they learn to tolerate the discomfort. Cognitive restructuring is a technique which helps the person reframe (restructure) thoughts by viewing them in a different light and from a different perspective. Finally, relapse prevention includes identifying specific situations and potential triggers that might be associated with a setback. The patient then proactively thinks of ways to cope with these situations and thereby prevent, or at least reduce, the risk of relapse.

In summary, CBT helps people recognize their repetitive thoughts and unconscious behaviors and begin to confront their fears and anxieties. This increased awareness helps patients to witness their maladaptive thought patterns and incorporate more adaptive cognitions, which can lead to significant improvement. CBT proves to be effective in dealing with the irrational beliefs of those with BDD. This type of psychotherapy challenges their false beliefs and obsessive behaviors. Through therapy, the patient begins to expand his self-concept to include more dimensions than appearance. The behavioral interventions used in this form of psychotherapy target the tendency towards social isolation and anxiety.[24] Slaughter and Sun[24] report that CBT leads to increased comfort, relaxation, and joy, and more time socially interacting with others.

Rosen, Reiter, and Orosan[12] conducted a promising controlled study of CBT for persons with BDD. This study provided evidence that CBT is an effective method of treatment for BDD. Specific techniques used included modifying intrusive thoughts of body dissatisfaction, adjusting overvalued beliefs about physical appearance, exposure to avoided body image situations, and eliminating body checking. The treatment group demonstrated improvements in self-esteem, appearance preoccupations, and body dissatisfaction, as well as overall functioning. This controlled study demonstrated the value of using CBT to treat persons with BDD. Phillips[11] and Anderson and Black[5] argue that CBT should be used as a first-line approach for mild BDD and in combination with medication for severe BDD. The associated risks of this disorder, such as suicide, reinforce the need for frequent sessions and an intensive treatment program.[4,12]

An important factor to consider regarding treatment is that persons with BDD are often resistant and hesitant to enter treatment. They are often reluctant to share their thoughts and behaviors with others due to shame and embarrassment. Educating the patient with BDD about their disorder can help address their resistance. Many may believe they are alone in their suffering and that there is no escaping their present lifestyle. Normalizing the condition and educating them about the number of other people who experience similar symptoms is crucial. In addition, it is important to affirm the possibility of treatment and improved functioning. If it appears appropriate

for the patient, his or her family and close friends might help facilitate the treatment process. Much is unknown about BDD and its effective treatment methods. A crucial direction for future research is to examine alternative treatments for BDD.

FUTURE DIRECTIONS: MINDFULNESS-BASED INTERVENTION FOR BDD

Current theories about the etiology and maintenance of BDD suggest that mindfulness training may be helpful for this problem. Mindfulness-based interventions are attracting increasing attention, and the recent empirical literature suggests that they may be effective for a variety of disorders.[28] Future research could benefit from exploring the potential applications of mindfulness to the treatment of BDD. Below we introduce mindfulness and put forth its possible benefit for the treatment of BDD.

Mindfulness meditation, although derived from a 2,500-year-old Buddhist practice, has been incorporated into Western medicine as a universally applicable and culture-free intervention. It was initially incorporated as the central component of the Mindfulness-Based Stress Reduction Program (MBSR) developed Kabat-Zinn and colleagues,[29] and has since expanded into numerous interventions, including dialectical therapy for borderline personality disorder,[30] mindfulness-based cognitive therapy for prevention of relapse of MDD,[31] and mindfulness-based eating awareness therapy (MB-EAT) for eating disorders.[32] Twenty years of research on mindfulness interventions has demonstrated its effectiveness across a wide range of clinical disorders, including stress, anxiety, and depression in both clinical and non-clinical populations.[33,34]

Further, research suggests that mindfulness is an effective intervention for prevention of relapse of MDD.[31] Evidence also suggests that MBSR may be an effective intervention for psoriasis,[35] chronic pain,[29,36] and fibromyalgia.[37] Finally, and most specifically related to BDD, mindfulness has been associated with improvements in anxiety-related disorders,[38] eating disorders,[32] and OCDs.[39]

Mindfulness is defined as nonjudgmental awareness of the present moment.[29] It is often conceived of as a skill[40] which can be developed through formal meditation practice. During mindfulness practice, participants learn to regulate their attention by focusing nonjudgmentally on stimuli, including bodily sensations, cognitions, and emotions. As the skill of mindfulness develops, participants are able to observe thoughts, emotions, and sensations "without evaluating their truth, importance, or value, and without trying to escape, avoid or change them."[41] Mindfulness is believed to increase self-awareness and self-acceptance,

and to reduce emotional reactivity. The cultivation of greater awareness and clarity allows one to make conscious choices instead of automatically reacting to difficult and stressful situations. Numerous models[40,41] have been presented on the mechanisms and pathways through which mindfulness effects change.

Meditation is often simplistically and naively represented as a so-called relaxation technique; however, it is better understood as a means for promoting self-awareness and self-regulation. Mindfulness allows one to gain insight into affective, cognitive, and behavioral aspects of human functioning. In fact, mindfulness meditation is often referred to as insight meditation. The word mindfulness is translated as *to see with discernment* or to see clearly (pp. 19–20). This ability to see one's self and one's life with greater clarity seems to be of potential benefit in the treatment of BDD. For example, as discussed above, BDD is comprised of automatic negative thoughts and compulsive behaviors that arise do to a perceived defect. Typically, the person with BDD does not see reality clearly and is consumed with thoughts about the perceived flaw and emotions of worthlessness. These cognitions and emotions translate into a dysfunctional way of being in the world, which is limiting on many levels, and leads to numerous deleterious consequences. Through mindfulness intervention, inaccurate cognitions could be recognized and seen as thoughts and not absolute truths. Emotional states could be noted and observed as opposed to reacted to, and compulsive urges to behave in unhealthy ways could be identified instead of enacted.

It is interesting that mindfulness interventions have been successfully adapted for the treatment of OCD, anxiety disorders, and eating disorders, which are all highly related to BDD. It has been suggested that one of the underlying mechanisms of mindfulness is acceptance.[42] Clearly, one dimension of BDD involves a fundamental lack of acceptance of oneself. Mindfulness intervention serves the dual role of increasing one's awareness of maladaptive thoughts, feelings, and behaviors, as well as helping one to cultivate an acceptance for the way things are. This ability to see oneself clearly and accept all aspects is at the heart of mindfulness practice. For persons with BDD, this seems a valuable, if not essential tool. We suggest that future research could benefit greatly from exploring the applications of mindfulness-based interventions for the treatment and prevention of BDD.

CONCLUSION

BDD has become an increasingly prevalent disorder that results in significant deleterious consequences for persons who suffer from it. This disorder is an insidious one, as it falls along a continuum that is becoming more and

more normal in American culture: an obsession with appearance. However, it is crucial that this disorder be rigorously explored and taken seriously by current psychological theory, research, and practice. Although research is beginning to examine symptomology, etiology, and treatment for BDD, this research is still in its infancy. Well-designed and controlled studies are needed to add to the growing body of literature. Further, creative and innovative interventions need to be developed. Finally, and most importantly, psychologists need to be aware of the prevalence of BDD and of its debilitating consequences if left untreated. Current abnormal psychology needs to draw the line in discerning when *concern about appearance becomes pathological.*

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Munchausen by Proxy

Catherine C. Ayoub

> *"Well, Mrs. Gregory (mother) we've got good news. The Holter monitor shows no significant findings that lead us to believe that Julie has a heart condition requiring further tests. Nothing outside a normal parameter." The hospital doctor is following the zigzags on my chart, showing us what he can't find. Mom slaps her leg.*
>
> *"What? What do you mean, you can't find anything?" She counts on her fingers the number of things leading up to this moment. "Dr. Kate called you, she told you this kid had a racing heart, was out of breath all the time. She told me we were going to get helped here, that we'd finally be able to get to the bottom of things. What are you trying to tell me here, that this kid is normal? That I'm making this up?*
>
> From Julie Gregory's autobiography *Sickened:*
> *The Memoir of a Munchausen by Proxy Childhood*[1]

In 1977, Roy Meadows, a British pediatrician, coined the term Munchausen by Proxy (MBP) to describe illness-producing behavior in a child that is exaggerated, fabricated, or induced by a parent. Meadows adapted the term used by Dr. Asher in 1951 for adult Munchausen syndrome to describe use of the child as a proxy. Adult Munchausen syndrome is a psychiatric disorder in which an adult intentionally induces or feigns symptoms of physical or psychiatric illness in order to assume the sick role. Both conditions were named for the infamous 18th-century Baron Karl Friedrich Freiherr von Munchausen, a military mercenary who told fantastic stories of his exploits. Hence, the term Munchausen became known in the mid-20th century as a psychiatric condition that centrally involved deception, or what Marc Feldman[2] describes as "disorders of simulation."

In the last 15 years, a growing body of literature on MBP supports the assertion that it is a separate disorder from Munchausen syndrome, with specific characteristics, etiology, and prognosis. At the same time both MBP and Munchausen syndrome are members of this group of disorders that involve willful medical or emotional deception.

MBP is described as both a pediatric and a psychiatric disorder. These terms capture the interaction that leads to abuse of the child by a mentally ill parent perpetrator. The form of child abuse resulting from MBP is now called *abuse by pediatric illness or condition falsification*. The psychiatric diagnosis for the perpetrator is called *factitious disorder by proxy*.[3] As a consequence, work in the field focuses on the child's victimization as well as on the parent's psychiatric disorder; the literature includes perspectives from pediatrics, psychology, social work, psychiatry, education, law, and ethics. Many authors expand the discussion to include not only the interaction between the parent (usually mother) and the child, but also the relationships among the mother and the various health care providers. MBP is also characterized as a disorder involving family dysfunction and transgenerational effects, as well as powerful marital relationship dysfunction, all combining to perpetuate the abuse of the child.

The medical and psychological literature is now replete with articles and more than a dozen books dedicated to the topic. Major pediatric and child psychiatric texts contain descriptions of MBP. Definitional constructs have been synthesized by several groups in an effort to reach a multidisciplinary consensus in the field. The disorder has been widely recognized as a legitimate and quite dangerous form of child abuse in most juvenile and family courts around the country.[4]

DEFINITIONAL ISSUES IN MUNCHAUSEN BY PROXY

MBP is described as "the intentional production or feigning of physical or psychological signs or symptoms in another person who is under the individual's care for the purpose of indirectly assuming the sick role" (p. 475) in the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition *(DSM–IV)*.[5] However, a great deal has been written on the disorder since this limited description was provided in 1994. A clearer way to understand the nature of the child's victimization is to consider how illness is systematically exaggerated, fabricated, and/or induced by a parent or caregiver.

Children are victimized by a variety of means, limited only by the imagination of the perpetrator. They are often inappropriately placed in the sick role, and subjected to unnecessary hospitalizations, tests, procedures, and treatment for physical, psychological, or educational conditions (e.g., attention-deficit/hyperactivity disorder (AD/HD) and learning problems). The second

component of MBP is the psychiatric condition of the perpetrator that helps explain the motivation, willfulness, and clinical presentation of the caregiver. Caregivers intentionally falsify history, signs, and/or symptoms in their children to meet their own self-serving psychological needs.

According to the current literature, between 77 percent and 98 percent of perpetrators are women; the vast majority of them are the child's biological mothers.[6] Some fathers have also been identified as perpetrators, as have other caregivers such as foster mothers. Another form of MBP involves adult victims, most often patients abused by their nurse caregivers. It remains a fact that factitious disorder by proxy is for the most part a disorder of women and a misuse of so-called mothering.

The prevalence of MBP continues to be debated and is a difficult issue to assess given the convincing deception that is the core of the disorder. There is likely underreporting of the problems and underestimation of its prevalence. One careful, conservative British study[7] estimated that the combined annual incidence of MBP in the form of nonaccidental poisoning and nonaccidental suffocation was at least 2.8/100,000 in children aged less than a year. However, given these estimates and the wide spectrum of pediatric conditions that have been known to be feigned in both young and older children, the problem is far from rare. Furthermore, experts now agree that many MBP cases are likely to go undetected because of the covert nature of their presentation, the striking ability of the perpetrators to fool those around them, and the many obstacles to the identification of these cases by professionals.

CHARACTERISTICS OF CHILD VICTIMS OF MUNCHAUSEN BY PROXY

In order to illustrate some of the salient characteristics of MBP, we present our current prospective study of 30 child victims and their families in which MBP was confirmed through court findings. Of the 30 children, 27 percent were infants, 33 percent were toddlers or preschoolers, 23 percent were elementary school age, and 17 percent were teenagers. This is consistent with the literature that finds that the majority of victims of MBP are less than six years of age, but also documents serious MBP with older children and adolescents. Boys and girls were equally affected, and over three-fourths of the children were Caucasian in our study; this as well is consistent with the findings of others.

The number of illness presentations of the children in our study was quite varied. Many children had multiple symptoms and multiple organ systems involved in their physical or emotional illnesses, and many were repeatedly

subjected to serious and potentially life-threatening situations in the name of their illness and its treatment. While Mary Sheridan, in her meta-analysis of 451 cases of MBP, found that 6 percent of the child victims and 25 percent of their siblings died,[6] in our study, which included identified victims and their siblings, 17 percent of the children died, the majority as victims of suffocatory abuse or apnea.

Although the children presented with a wide variety of symptoms, some symptom groups predominated; these findings are consistent with others in the literature, but in no way encompass the vast number of illnesses that are feigned. Most children had multiple symptoms in at least three and as many as seven different organ systems. A typical medical history included many office visits, often to a variety of specialists, and a number of major and minor surgical procedures to relieve symptoms that were exaggerated, fabricated, or induced.

In 23 percent of the cases, children had gastrointestinal symptoms including vomiting, failure to thrive or grow, reflux, esophagitis, chronic secretory diarrhea, neurologic intestinal pseudo-obstruction, and chronic abdominal pain. Many of these children had had a number of procedures to assist their ability to maintain adequate nutrition, including feeding tubes in their stomachs (gastrostomy) and/or intestines (jejunostomy), and nutritional supplementation directly into their veins (TPN). Once children had direct lines into their blood streams, they often experienced an extraordinary number of infections of these lines—up to 300 to 400 times the expected rates for infection. Children with gastrointestinal problems were likely to have had complaints since the first year of life and tended to become more and more debilitated as time went on.

A second group of children (30%) were reported to have recurrent seizures. A third group of children experienced repeated episodes of apnea (20%). These children would reportedly stop breathing and often required resuscitation. Three children in this group died. This is consistent with the findings of a number of authors.[8,9] Another group of children (13%) experienced abnormal serum insulin levels, either as uncontrolled diabetes or as unexplained low blood sugar (hypoglycemia). Yet another group of children were diagnosed with rare autoimmune or genetic disorders (10%), while others had unexplained exacerbation of their asthma (10%), the most common of chronic childhood conditions. One child was poisoned, and two had blood or bleeding difficulties (7%). The final group of children had psychiatric or learning disabilities that were exaggerated, fabricated, or induced. Their problems included AD/HD, bipolar disorder, and psychosis (10%).

The child's medical care occurs in a context of a caregiving relationship in which the medical management of the child is posed as maternal care. Some of the perpetration occurs in forms difficult for a child to detect or understand as

victimization, such as misadministration of medication or misrepresentation of medical history. A failure to detect or appreciate the perpetration prevents children from developing the more explicitly traumatized worldview of children victimized in more direct forms of maltreatment, but also has made it easier for them to misapprehend, deny, or compartmentalize their victimization. In the face of persistent fabrication, children risk potential serious physical injury due to exposure to unnecessary procedures, and almost universally suffer serious and long-lasting psychological trauma. Judith Libow[10] found that adult survivors frequently reported that abuse continued not only throughout childhood, but extended well into adulthood. Schreier and Libow[11] note that often children are at serious physical risk even while in state custody, since some parents may attempt to increase their harm to the child or attempt abduction as they are confronted.

MANAGEMENT OF ABUSE BY PEDIATRIC CONDITION FALSIFICATION

Safety is the first and primary management issue for the MBP child victim. This often means removal of the child from the home with no, or at most, closely supervised contact with the perpetrating parent. Placement with another family member may be appropriate if the relative appreciates the meaning and seriousness of the MBP diagnosis. Long-term management should include monitoring, team-based treatment, and case oversight by the court. Many children recover dramatically from their physical illnesses when they are separated from their mothers.

A number of authors have proposed MBP protocols for hospitals and health care facilities. Kinscherff and Ayoub[4] recommend protocols for health care providers, schools, and psychiatric facilities that include:

- prompt case consultation with relevant medical specialties and a consultant knowledgeable about MBP
- prompt notification and consultation with hospital legal staff familiar with the protocol and state child protection and criminal procedure law
- provisions for ensuring the safety of the child, including: (1) intensive monitoring or temporary suspension of parent-child contact pending more definitive diagnosis and/or the involvement of child protection authorities; (2) a procedure by which a preemptive court order barring removal of the child by parents might be secured prior to informing parents of the allegations of MBP; or (3) a protocol permitted under state law by which a physician might place a "hold" upon discharge pending notification of the court
- statements of conditions under which covert staff or electronic surveillance would be initiated as a routine element of the protocol, as well as specification of who has the authority to initiate covert staff or electronic surveillance

- description of how the mandated reporting requirement will be accomplished, including designation of a specific person to make the mandated report and the content of the report to be made to state child protection authorities
- indication of the steps to be followed in the event a parent attempts to remove a child against medical advice, including the role to be played by hospital security
- provision for designation of a single source of information to whom the family or others with an interest in the case can turn for reliable information regarding the situation and the condition of the child
- designation of persons responsible for assessing the reactions of hospital staff, including the need for staff meetings to resolve differences regarding case management or involvement of child protection authorities.

Optimally, the MBP protocol pulls together a clinical management team that has access to professional consultation regarding clinical care, child protection, documentation, and legal case management. Hospital child maltreatment or psychiatric consultation liaison teams should be specifically trained about MBP and promptly contacted when medical or psychiatric units raise concerns about a case.

Implementing an MBP hospital protocol not only reduces the likelihood that individuals or units will make legal errors in managing suspected cases, but it also provides documentation of parental informed consent, execution of mandated legal duties, and evidence of a process of thoughtful professional judgment that is the best defense in the event of formal complaints against professional licenses or malpractice lawsuit. Use of a protocol reduces the number of false allegations, and makes it more likely that genuine MBP cases are identified, and that the level of clinical risk to the child is accurately assessed. This, in turn, makes it more likely that cases requiring a response from state authorities will result in the temporary placement of the child out of the home, or in the appointment of a guardian to make medical decisions pending the outcome of further investigation.

CHARACTERISTICS OF THE PERPETRATORS AND FAMILIES IN MUNCHAUSEN BY PROXY

If there is reasonable suspicion of pediatric illness falsification abuse, then it is important to consider whether there is information in the record consistent with clinical indicators of factitious disorder by proxy in the children's mother or primary caregiver. These features would include

- the presence of impostering for the purpose of actively relating to and controlling individuals seen as powerful, most often, but not limited to, physicians. These relationships are not necessarily serial and may be multiple. In a number

of instances, once cases become public and/or the power over the child is shifted from medical personnel to the court, the focus of the mother's relationships and controls also shifts. Impostering is often seen in MBP mothers beyond the scope of their interactions with health care personnel, and those relationships should be assessed as well. Characterological traits of lying are incorporated into the parent's need to gain control and attention by impostering the "good mother" and often other roles as well, such as the dedicated child advocate, the well-to-do volunteer, or the committed health educator. Since monetary gain is another route to power, the deception may well extend to financial and other status realms.

- Relationships between the mother and child often present as intense. Mothers may be overbearing and their need to be recognized may escalate symptoms just as the child's health begins to improve. At the same time, MBP mothers may be unable to describe their children as three-dimensional individuals, and may express little distress in separation from them.
- Mothers are often quite knowledgeable about medical concerns and techniques. Many have or aspire to jobs in medically related environments and/or have access to medical information or individuals with such knowledge.
- The majority of women diagnosed with MBP have underlying characterological disorders of a mixed type and frequently experienced a childhood trauma such as a serious illness, separation, or death. They often describe their childhood histories as either idyllic or severely abusive. Sexual abuse is another common finding in the childhood histories of these mothers. They are usually highly organized in their emotional functioning, but on psychological testing reveal poor perceptual accuracy and reality testing, anger, and narcissistic traits.

In our study we found mothers to be the perpetrators in all of the 30 cases. In each case they "impostered" to present as good and caring mothers. The psychological motivation for their actions was to receive status-enhancing praise and acknowledgement for their self-sacrificing, competent care of their children. Although mothers were extremely convincing in their roles, discovery often illustrated the deliberate and planful nature of the deception. Many mothers worked to subtly manipulate people that they perceived as powerful— usually physicians, but also their child's nurses, therapists, or consultants. A number of mothers used their children's illness to seek notoriety for themselves by requesting special services from foundations like "Make a Wish" and by contacting celebrities to publicize their child's plight. In each case the child was used as the object or vehicle to direct admiring attention to the mother's parenting. The child's needs as perceived by the mother often changed as her status-seeking behavior varied or escalated. The central organizing feature of maternal behavior was playing the role of the caring parent rather than concern for the genuine needs of the child.

Mothers in our study ranged from 17–41 years of age. In many cases they had been groomed for the part within their own families of origin. They were often closely held, but not protected, by their own mothers. Many mothers had very ambivalent relationships with their own mothers. Although families of origin were often presented publicly as flawless, typical maternal histories included sexual abuse, physical assault, and marital conflict and neglect. In 65 percent of the cases, mothers induced illness in their children; evidence of exaggeration and fabrication was present in every case in our study.

All of the mothers were very knowledgeable about their children's conditions. Some gained their knowledge from formal careers as health care professionals (nurses, nurse's aides, pharmacy assistants, medical office managers), while another group were being trained as medical assistants or special education advocates at the time of the abuse. About half of the women in the study had some formal education relating to the physical health, psychological, or educational issues of their children.

Mothers also had a higher than expected rate of substance use, which in all cases included narcotics obtained from physicians for multiple physical or psychological complaints. More than half of the women showed some evidence of fabricating, exaggerating, or inducing symptoms of their own. Several had lengthy histories of physical complaints, many of which were not evident until evaluators asked about maternal medical histories. In the cases in which mothers and their children each had multiple symptoms, the exacerbation of symptoms seemed to alternate between mother and child. In some cases, fathers also had symptoms of illness that were identified by their spouses, who often accompanied them for their own assessment and treatment. In our study three fathers with multiple psychiatric diagnoses had those diagnoses rescinded when they were reevaluated by their original diagnosticians out of the presence of their wives.

Marital situations varied across the families. About a third of the fathers in our study had some history of drug and alcohol abuse. Marital conflict and domestic violence were prevalent in a number of cases, often leading to divorce. In one group of two-parent families, husbands strongly supported their wives in spite of clear evidence and legal findings of MBP abuse of their children. These fathers often served as messengers between their wives and their children, and frequently coerced their children into increased contact.

Other fathers, involved only sporadically in the lives of their children, essentially enabled the abuse either through their passivity or collusion with and support of the perpetrator prior to detection. These fathers were the most likely to continue to support their perpetrator wives after detection, making them unreliable protectors of the child. (This is also the case for any potential

caregivers, family members, or professionals, who ally with the perpetrator and disavow any risk to the child.) Some fathers not only supported their partners, but became more actively engaged in a variant of the maternal impostering behaviors. In follow-up, we found that little could be done to change a father's position about his wife if he was strongly allied with the MBP mother at the time of disclosure. In at least three of our cases, fathers initially followed the court's suggestion to separate from their wives in order to reunite with their children, only to return to their wives and clearly articulate their belief that the abuse had not occurred.

A second group of fathers appear estranged at the time of the abuse. They may be separated or divorced; their wives often claim no knowledge of the father's whereabouts. With some limited detective work, these fathers are usually located and discovered to have been in contact with their ex-spouse, especially through child support agreements. These fathers have been systematically shut out of their children's lives and are often willing to become re-involved with their children if they have some state protection from their wives. Extended family, particularly paternal relatives, are also often estranged and may be positive resources for care of the children.

Although 55 percent of the study fathers acknowledged the allegations of MBP as opposed to only 10 percent of mothers, a majority of fathers equivocated about the veracity of the allegations for a considerable period of time. Some hesitated to get involved because their wives strongly opposed any increased contact with their children. Some fathers who are able to separate both physically and emotionally from mothers, restructure the family system to acknowledge MBP, and actively work to protect the child, have been able to safely parent following a lengthy intervention period. Safe and secure parenting is also contingent upon the father's ability to function as the primary caregiver, a role for which many MBP fathers are poorly equipped. Once fathers clearly separate from the MBP mother's influence and engage in productive treatment, an extended assessment of their parenting capacity is recommended.

Careful evaluation of family members and relatives is strongly recommended before any contact with the child victims is permitted. MBP is a family system disorder that frequently is transgenerational and in which extended family may serve as enablers strongly supporting the mother's continued denial and impostering. For these reasons, family placements are viewed with considerable skepticism in most MBP cases. However, in our study, placements with paternal relatives were some of the most successful from the child's perspective. Regardless of the relationship between the child and the caregiver, the caregiver must fully understand the nature of the disorder, be willing to acknowledge the diagnosis, and demonstrate both ability and desire to protect

the child. Second, relative placements tend to be stressed by the intense and often unrelenting pressure placed on relative custodians by the immediate family, especially by mothers and their advocates. Active attempts to increase contact with the child and to manipulate any approved contact often escalate and make such placements quite difficult. The court, child protective services, and providers should be actively involved in providing support and protection for relative caregivers.

IMPACT ON CHILD VICTIMS IN MUNCHAUSEN BY PROXY

The extent and longevity of emotional symptoms vary in part based on the developmental age of the child, the extent and intensity of their abuse exposure, and their current situational protection and support. Of the 30 children in our study, 43 percent were placed in foster care. One was returned to his mother, who did not receive any treatment. The remaining 24 percent of children were placed with a relative. In most cases, mothers visited regularly, anywhere from once a month to every day.

All of the children in our study were physically healthy upon leaving their biological homes, and all remained healthy except for the child returned to his mother. According to third-hand reports, that child has had recurrent physical symptoms. One child with factitious psychological symptoms did have some baseline disturbances that recurred while he was placed with his father.

Most of the child victims presented with significant emotional difficulties, the most common being oppositional-defiant disorder, posttraumatic stress disorder, and attentional disturbances. All of the children with significant exposure to falsification of symptoms had serious psychological sequelae with the potential for long-term impairment. Major psychiatric symptoms seen in a majority of the children are listed in Table 8.1.

Only the children removed very early in their victimization process and protected from subsequent maternal contact were free of major psychiatric symptoms. Children fared the best psychologically when they were removed from their biological homes at a young age, placed in permanent safe alternative homes as soon as possible, and had little or no contact with mother or her proxies.

The exception to this rule was the two situations in which mothers fully admitted their perpetration early and were sincere and committed in their work to change their behavior. An integrative treatment process lasting from five to seven years included all of the treatment providers for the child and family, child protective services, and a court-designated expert in MBP.

Table 8.1
Characteristics of 30 Children Victimized by Pediatric
Condition /Illness Falsification

1. Hyperarousal/attentional and concentration difficulties

2. Oppositional behavior, including oppositional defiant disorder

3. Lack of perspective taking

4. Driven by appearance

5. Attachment disordered — clingy, unable to play alone, demanding of attention, unable to establish and maintain relationships with adults or peers

6. Sense of entitlement and exclusion from adherence to basic rules of interaction

7. Illness complaint prone

8. Lying, impostering, manipulation to gain attention and meet needs covertly

9. Sexualized behavior/seductive behavior

10. Boundary confusion and issues with appropriate boundaries

11. Controlling (either through caregiving or aggressive/sadistic styles)

12. Body image issues, including view of self as ill or incapable

13. Aggressive/destructive behavior, especially with younger or weaker children or animals as targets

14. Self-mutilation, self-harm, especially in children as they enter adolescence

15. Anxious sadness and/or depression

16. View of the environment as either "the best" or "the worst" — no ability to see the nuances in behavior

17. Simplistic processing, compartmentalization of events and emotions through time

18. Distorted reality testing

19. Disturbed eating and sleeping patterns

Children did worse from a psychiatric point of view when their victimization lasted more than two years before exposure, when they were returned to their mothers with little or no insight-oriented treatment for the perpetrator, and when they were exposed to their mothers for a considerable length of time without maternal progress in MBP-focused treatment. Children with unsupervised contact with their mothers or their mother's proxies also fared poorly, as did children whose fathers were unable to care for them due to dependency on mothers for structure. Finally, children whose permanent placement was delayed or never completed also experienced serious psychiatric symptoms.

The psychological impact of victimization through MBP is significant and chronic. Basic problems with attachment, relationship-building, and social

interaction, as well as attention and concentration, are common in these children. The presence of oppositional disorders in these victims is significant, as are patterns of reality distortion, poor self-esteem, and attachment difficulties with adults and peers. Although these children can present as socially skilled and superficially well-adjusted, they often struggle with the basic relationships. Lying is a common finding, as is some sadistic behavior toward other children.

Children with stable, long-term placements in which they were protected from their mothers and supported in their move toward health had fewer long-term difficulties than children who had more exposure to their mothers and less stable placements. Even after an extended recovery, many of these children remain trauma-reactive and are vulnerable to cyclical anger, depression, and oppositionality. The implications for intervention are numerous. Several of the most salient are listed in Table 8.2.

FORENSIC ASSESSMENT OF MUNCHAUSEN BY PROXY

An evaluation to address issues of parenting capacity and the best interests of the child in light of allegations of exaggeration, fabrication, and/or inducement

Table 8.2
Interventions to Consider with Children Abused by Pediactric Condition/ Illness Falsification

1. Placement in a home that has expertise with emotionally disturbed children from the outset reduces the child's distress and decreases the likelihood of multiple placements.

2. Structure and external limit setting is critical to meeting the child's safety and care needs.

3. Careful supervision should be in place when placing Munchausen by Proxy victims with small children or animals.

4. School assessment is needed as early as possible. Any children are identified as having attention -deficity hyperactivity disorder when they are really trauma reactive.

5. If visits with mother are required, then limited, structured visits under careful professional supervision are strongly suggested in order to avoid further victimization.

6. Careful boundaries should be articulated to the child, and clear reinforcement of those boundaries should be enforced regularly.

7. Limit or end mother's visits if child's behavior escalates or remains distressed.

8. Insist on continuity of caregiving and limited respite care. Long-term placements should be sought from the beginning to reduce attachment difficulties.

Caregivers must be actively aware of the child's victimization and of the need for active protection.

of illness in a child by a parent is a complex process. When juvenile courts are involved, such evaluation is strongly recommended in order to inform and expedite decision making. In such situations, the focus of the assessment is on the interactional patterns between the caregiver(s) and each child, with attention to:

- the child's illness experience and functioning (the child as alleged victim of child abuse by condition or illness falsification), and
- the parent's psychological functioning with attention to differentiating factitious disorders by proxy (factitious disorder not otherwise specified (NOS) in the *DSM–IV*[5]) and other possible psychological etiologies of the parent's behavior, attitudes, and beliefs toward the child.[3]

The process of evaluation typically includes the following:

- Comprehensive record review and contacts with collaterals is a central component of any evaluation in which MBP is raised as an issue. Collateral contacts include both professional and lay persons, including other family members, who might be able to shed light on the current situation.
- The emotional and physical functioning of each parent or primary caregiver, both in the past and in the present, is explored through a series of clinical interviews and through psychological testing. In a number of cases, maternal grandparents are also interviewed either initially or as follow-up. Fathers and their family members, if they are in a position to have contact with the child, should also be evaluated, as should any other relative with interests in having contact with the children.
- A review of the child's past and present physical and emotional functioning, including, but not limited to, information about past and current daily routines, symptoms, and behaviors is obtained through observations, record review, and interviews with past and current caregivers.[13]

Although such an evaluation is extensive, the complexity of the MBP situation usually requires such comprehensiveness in order for juvenile and family courts to proceed with findings and dispositional issues that focus on the child's best interests. Such an evaluation, ordered by the court, provides the evaluators with the neutrality as well as the court's authority to work with all parties and to request the court's support in gaining access to individuals and records.

VISITATION ISSUES IN MUNCHAUSEN BY PROXY

Visitation should be considered very carefully in cases of alleged MBP. The child's victimization is typically significant and chronic. Current literature indicates that victimization is likely to continue to occur with few exceptions, even in the light of treatment. Children have been revictimized by their mothers even during highly structured and well-supervised visits. In addition to the physical

danger, visitation can offer enormous potential for psychological harm. Child victims of MBP tend to have long-term and serious sequelae to their abuse that are impacted by visitation. A number of experts recommend that there be no direct or indirect contact between child and mother (or other family members who might serve as proxies for mother) until the evaluation is complete, a treatment plan for the family is in place, and mother has made significant progress. If visitation is to be instituted after all these contingencies are satisfied, the following general guidelines are recommended:

- Visits should be regular; it is important for the child to know in advance when visits will take place. Visits should be scheduled to minimize disruption in the child's regular routine. For example, visits should not be scheduled during the school or day care hours. It is quite important for younger children especially that visits be held on the same day each week for the same length of time; it is equally important for the child's mental health that visits not be rescheduled or cancelled except for significant emergencies. In order to achieve this goal, a system of back up visitation supervisors is strongly recommended. In cases where there is considerable danger of physical or emotional distress to the child, visits should be discontinued. Reduction or discontinuation of visits is strongly recommended when, over time, mothers are unable to acknowledge perpetration, unless special circumstances warrant visitation in order to meet the child's best interests. Some therapists recommend that visitation with the perpetrating parent, spouse, and the child be postponed until the MBP mother has successfully participated in treatment for a year or more. The first visits are usually scheduled at long intervals, with frequency increasing if therapy progresses successfully.
- A consistent, professional supervisor who is fully informed about the details of the case should supervise all visits. This supervisor may be a trained clinician from the Department of Social Services or another agency. Relatives or any other partial parties should not attend or supervise visits until they are approved by both the child's and mother's therapists and found to be appropriate by the court. The supervisor must be able to observe and hear the child and mother at all times during the visitation process.
- Visits should be held in a neutral setting. They should not be held at the biological home or at the foster home, or at the home of relatives. Mutually agreed upon neutral sites can be explored with the understanding that the child does need some predictability in his surroundings and sites should not be changed frequently.
- During the visits, parents and/or other relatives should be engaged with the child or free to focus on him or her at his or her request. Conversations about the child, including information pertaining to his or her general health and well-being, as well as discussions about visitation and legal issues, should not

be allowed during visits. The supervisor/child protective worker and the parents are encouraged to set up a regular contact time outside of the visits to discuss such matters; this may take place either by phone or in person and should precede the weekly visits. Such exchanges should be scheduled at a routine, consistent time, and offered to one or both parents.

- The child's medical or psychological condition should not be discussed in his or her presence, nor should he or she be asked medically related questions except when an acute illness presents during the visit. The visitation supervisor/child protective worker should continue to relay current general information pertaining to the child during the scheduled encounters with the parents. All information about the child's condition should be relayed only through the designated professionals and not by relatives.

- Food should not be brought to the visits, nor should the child be asked to eat during this time except as mutually prearranged, especially in cases in which inducement was an issue. Exceptions can be made for special occasions such as birthdays with approval from therapists and the team. All food available at visits must be purchased and presented in the original store packaging. More permissive policies with regard to food should be made contingent on mother's progress in treatment.

- Visits may include parents and, in some cases, siblings. Other relatives who wish to visit under supervision may be included, if mutually agreed upon by the parties, following an evaluation of their interests and perspective on the child's victimization. No unsupervised visitation should take place with relatives unless those individuals are fully cognizant of and able to accept the child's victimization as described by the court findings and can abide by the agreements about information sharing developed by the supervisor with assistance from the treatment team.

- Exchange of gifts during visits is strongly discouraged. Exceptions may be prearranged for given holidays such as birthdays and Christmas; all gifts should be prescreened by child protection and/or the Guardian ad Litem. Parents should be encouraged to provide the visitation supervisor with a list of holidays on which they routinely exchange gifts so that such practices can be prearranged to the mutual benefit of all involved.

- In general, all electronic or photographic recording of visitation should be discouraged. Any such recording during visits should be collected and maintained by child protection or a designee of the court and made available to all parties. No unilateral photography or electronic records should be made. All electronic recording should be maintained with primary attention to maintenance of the child's privacy. The use of such material should be carefully agreed upon before any data is collected.

- Other forms of direct communication between parent(s) and the child such as telephone calls are strongly discouraged as they cannot be monitored as safely as face-to-face or written communication. If they are to occur, they should be

scheduled at regular intervals and should be monitored. Optimal monitoring includes audio recording for the protection of all involved. Expansion of contact to telephone calls should proceed with mother's progress in the latter stages of therapy.

PLACEMENT, INTEGRATIVE MANAGEMENT, AND REUNIFICATION

The presence of credible deception on the part of mothers in MBP makes it critical to use multidisciplinary teams to assist in the identification and management of MBP. One of the basic roles of the team is to assure the transparency and verification of the factual information pertaining to the family. After identification, professionals providing medical and psychological services to the child and family should form a team and work together to share information and coordinate treatment goals. Teams should at a minimum have one expert in MBP. The MBP team serves not only to improve the accuracy of the diagnosis, but also as a clinical and legal risk management mechanism.

Attempting to implement medical, child protection, mental health, and risk management measures without close coordination is ineffective and may result in the polarization of professionals and harm to the child. The treatment team is most effective when organized around the consultation and coordination of a court-appointed MBP expert (representing the child's best interests) and the oversight of the court; this expert can also serve as the liaison for reporting to the juvenile or family court. Continued juvenile court oversight is a central requirement for the success of this treatment process. The fragmentation of treatment goals is an ever present danger in the absence of a communication mechanism and requirement for providers.

In our study, 43 percent of children were initially placed in foster care, 10 percent of children were placed with fathers, 24 percent of children were placed with grandparents or aunts and uncles, and 10 percent either remained or were returned to their mothers who did not receive treatment. After five years of follow-up, 7 percent of the children remained with their fathers, 13 percent were returned to their fathers after foster care placements, 7 percent moved from the grandparents' home to their parents' after mother and father received intensive treatment, and 30 percent were released for adoption by relatives or foster parents. Most children continued to struggle with the psychological impact of their abuse, and many remained in mental health treatment for lengthy periods of time.

Any potential caregiver who persists in denying the child's abuse by the parent perpetrator when confronted with a finding by the court can justifiably be

denied contact with or placement of the child. If denial continues, then termination of parental rights with fathers as well as mothers is often recommended.[13] Depending upon the situation, closely supervised visitation may continue with selected family members, if found to be in the child's best interests.

Mental health treatment for the child typically includes developing safety and social skills, reducing self-blame, embracing wellness/releasing illness script, improving attachment relationships and reducing oppositionality, developing autonomy, reducing dissociation and compartmentalization of thinking and feeling, maintaining appropriate boundaries, understanding and managing family conflicts and loyalties, and reframing positive peer relationships. By early adolescence, most of the children were encouraged to consider and rework their understanding of MBP victimization. Young teens who were unable to work through their victimization had more difficulty negotiating adolescence than those who were able to reorganize their experiences in such a way as to reduce their sense of blame and confusion. Children who received little or no treatment directed at their victimization were more likely to struggle with acting out and oppositionality, as well as depression and self-harm issues during adolescence.

Treatment for mothers (perpetrators) is based on three prerequisites: genuine acknowledgement of perpetration, psychiatric stability in daily life, and successful treatment for substance abuse. The first phase of treatment for maternal perpetrators following acknowledgement is typically identification and exploration of their own victimization and its relationship to their attitudes and actions toward their children. Understanding her own victimization in the context of her patterns of victimizing her child, and bringing these two traumatic series of events into consciousness so that their relationship can be understood, is central to the mother's treatment progress.

This integrative process also serves to reduce isolation and diminish the cognitive distortions that these mothers tend to develop in social relationships. They learn to rely on the perceptions of trusted care providers with whom they can check out, and if necessary, correct, their initial impressions of other people. This integration of emotion, cognition, and action, combined with reduction of cognitive distortion, forms the basis for treatment of MBP perpetrators, and is also critical to general trauma treatment.

A third critical component of the first phase of treatment is to explore how the marital relationship contributed to and perpetuated the child's abuse. Couples who stay together must rework marital relationships so that there is a more active system of checks and balances around their communication, and in turn their actions related to the safety of the children. Each parent is accountable to the other for this process, which requires that partners actively acknowledge their

enabling roles in the child's victimization. This relational reframing is made easier when other family members support the need to ensure the children's safety.

The second phase of the treatment is the reworking of the relationship of the child to the family, with the mother-child relationship as a central focus of this process. The elements to be addressed during this phase include maternal recognition of the child as a unique individual rather than the vehicle for maternal need gratification. This recognition must be followed by a significant period of redefinition of the attachment relationships within the family and a reframing of the child's identity from one encompassing illness to one that embraces wellness. Safety issues for parent and child should be addressed continuously along the way. Some mothers, for example, do not want to assume any caretaking responsibility when the child is legitimately ill. Fathers and other relatives may have specific roles as active participants if this occurs.

Communication between perpetrator and victim about the MBP abuse is another critical part of the healing process. Mothers in our small treatment group were able to tell their children about their abuse and were responsive to questions from their children about the factual basis of their recollection. This process also greatly enhanced the child's ability to differentiate reality from perceptions distorted by their self-blame or denial. Finally, marital communication, which was reframed in phase I, was actively supported and reinforced through both marital and family therapy as the children continued to develop and new challenges arose.

Treatment for fathers remains a central component to the success of intervention with mothers. Fathers continuing to support the denial of MBP abuse significantly reduced the odds for successful treatment of mothers. Fathers in the study were required to maintain an active presence in their families, a role that they often had abdicated. They were expected to actively parent and were clearly charged with responsibility for protecting and nurturing the child. It was difficult for many fathers to participate in therapy for themselves and to take on the role of client. They tended to prefer avoiding or denying their role in enabling their spouse's MBP actions, even when they were able to acknowledge the abuse of their children. However, fathers often worked on understanding the meaning of anger and control issues and grew in developing a more psychological mode of thinking through individual therapy. A number of fathers had abdicated basic parenting responsibility to their wives. As a result, many fathers required help with basic parenting skills. All of these strategies with fathers were aimed at reducing paternal rigidity and the propensity for denial that fueled the MBP abuse.

If fathers have problems with drugs, alcohol, or domestic violence, or if they have been regarded by their partners as ill, these issues as well must be addressed

before primary responsibility of the children is placed with them. These additional problems found in a number of fathers reduce the likelihood that they will be able to assume primary responsibility for parenting their children. In two cases in our study, fathers initially took custody of their children but were not able to cope with the responsibility in the long-term.

LEGAL ISSUES IN MUNCHAUSEN BY PROXY

The conduct associated with MBP has a wide range of legal implications that can match the magnitude of the medical and psychosocial challenges. Attorneys and courts must deal with MBP cases in criminal prosecutions, child protection proceedings, and/or divorce actions. Health care providers working with suspected MBP cases should be aware of the legal considerations that arise when MBP is suspected. Not only are the means by which health care professionals detect and document an alleged case of MBP crucial to legal proceedings, but their conduct is also subject to scrutiny on issues including professional standards of care for diagnosis and treatment, informed consent for covert video surveillance or medical diagnostic procedures, and compliance with mandated reporting child abuse statutes. Both the child and family are best served by knowledgeable medical, mental health, social service, and legal personnel.

Unfortunately, the courtroom can become the extended battleground for mothers who are unable or unwilling to enter treatment. We have identified two groups of mothers. The first group of mothers fight against admission of MBP up until trial but then are unable to face the witnesses who describe their abusive actions. These women often attempt to settle their cases rather than to endure a court proceeding. In contrast, a second group of women appear to use the legal process to further their attention-seeking behaviors and to vigorously defend their cherished, carefully constructed identities as heroically loving caregivers to their children. These women seem to enjoy their roles on the stage of the courtroom, and often threaten professionals involved with extended litigation. They often take an active role in trying their own cases and may have hired and fired multiple attorneys in an effort to advance and control the promotion of their cause. This characteristic of never giving up is a hallmark of many of the maternal perpetrators. Many of them wait until their children are 18 to actively renew contact, even if their legal rights have been terminated.

In summary, MBP is a disorder that includes the significant and repeated abuse of a child, most often by the child's mother, who exaggerates, fabricates, and/or induces illness in the child. The physical danger to the child is considerable, and the psychological consequences to the child based on the violation of trust by the parent are tremendously powerful and enduring. Because perpetrators are so

skilled at portraying good and caring mothers, they are often convincing, even if the underlying evidence of abuse is evident.

This disorder also has important implications for our perceptions of women, particularly the role of mothers in our society. It challenges the notion that good mothering is an innate quality of all women. It makes clear the ways in which women harm their own children to meet their own needs. Although a number of attributes of women have been challenged by modern feminists, the sentimental vision of Mother remains intact well into the 21st century. Juries today are more likely to act on behalf of child victims, but they remain least likely to act when the perpetrator is the victim's mother. This fact alone behooves child advocates to carefully document and stand firm when confronted with this most difficult and complex disorder that places the appearance of women against the rights of the child. It also requires that we work ever harder to understand the difficult life circumstances of the women that lead them to harm their own children.

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Alzheimer's Disease: New Concepts in Diagnosis, Treatment, and Management

James E. Soukup

Alzheimer's disease (AD) is identified as one form of dementia in the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition *(DSM–IV)*[1] published by the American Psychiatric Association. This publication is the most current guide to the diagnosis of mental illness and clinical practice.

Dementia is defined as multiple cognitive deficits due to the physiological impact of a general medical condition, the effects of a substance, or due to other etiologies. Cognitive deficits include memory impairment and at least one other cognitive impairment including aphasia, apraxia, agnosia, or a disturbance of executive functioning. These deficits must be great enough to cause significant or occupational dysfunction.[1]

AD includes symptoms of the other dementias, including memory impairment; one or more of the cognitive disturbances (language, motor activity, failure to recognize or identify objects, and disturbed executive functioning); and significant functional disability. However, with Alzheimer's type dementia, the onset is gradual with a pervasive and progressive increase in disability. Dementias, especially Alzheimer's type, tend to increase with aging, although dementia is not a part of the normal aging process.

AD is an organic brain disorder that can be diagnosed by ruling out cognitive deficits due to other central nervous system conditions such as cerebrovascular disease, head trauma, Huntington's disease, Parkinson's disease, subdural hematoma, brain tumor, normal pressure hydrocephalus,

and Creutzfeldt-Jakob disease. Other systemic conditions to be eliminated in the diagnosis are vitamin B12 or folic acid deficiency, niacin deficiency, hypothyroidism, hypercalcemia, neurosyphilis, and HIV infection. Emotion disorders such as depression, anxiety, and schizophrenia can present symptoms of dementia, as can general medical conditions and substances, including medications for emotional and physical disorders.

AD is divided into early onset (before age 65) and late onset (after age 65). The majority of patients develop the disease after 85. With the aging of the American population, the percent of those who develop AD will greatly increase. Costs of care, as well as the emotional trauma, both to the patient and the patient's family, will be significant. This is why understanding the disorder and providing an accurate diagnosis is important. Without an accurate diagnosis, appropriate treatment and care cannot be provided. Currently there is no cure for AD or treatments known to impede or reverse the cognitive impairments of the disease. However, many of the other forms of dementia that are often confused with AD are treatable and reversible.

The Alzheimer's Association supports the necessity of a comprehensive and complete diagnostic work up when AD is suspected. The components of a comprehensive evaluation should include a medical evaluation with laboratory work to rule out systemic and general medical problems, a neurological evaluation to rule out neurological factors, a neuropsychological assessment, a pharmacological review, and an evaluation of cultural and education factors and functional ability. Unfortunately, few patients suspected of having AD are provided with such an assessment. Often, the diagnosis is made after a 15-minute visit with the family and a 5-minute evaluation of the subject's cognitive ability with a physician. Misdiagnosis is thus not unusual, with failure to treat the treatable and reversible causes of the symptoms of dementia which are not AD.

The Alzheimer's Association estimates that 4.5 million Americans suffer from AD. This number has doubled since 1980.[1] Figures on the total number of AD sufferers could well be distorted because of lack of adequate diagnostic methods, with a tendency to designate all forms or other forms of dementia as AD. However, even with these inaccuracies and distortions the impact on our aging population and their loved ones is enormous. By the year 2050, the Association forecasts that between 11.3 and 16 million people will have AD. Increasing life span increases the risk of developing dementias of all types. It is estimated that from five–seven percent of all individuals over 65 suffer from AD. The probability of developing the disorder doubles every five years after age 65.

It is estimated that at age 85 nearly 50 percent of the population has AD.[1] (Incidentally, *DSM–IV* has a diagnostic category "Age-Related Cognitive

Decline."[1] The criteria is an objectively identified decline in cognitive functioning related to the aging process within normal age limits. This presents another diagnostic argument—what is the normal cognitive ability decline for any age? This illustrates clinical and professional diagnostic problems related to accuracy and reliability.)

The Alzheimer's Association states that an individual with AD will live an average of eight years after the onset of the symptoms as estimated by caregivers (again diagnostic confusion). The Association states that annual costs for caring for individuals with AD is close to $100 billion. These estimates are supported by the National Institute on Aging. The disease reportedly costs American businesses $61 billion, which includes Alzheimer's health care and lost productivity of caretakers. Of the millions of people suffering from AD, 70 percent live at home, with about 75 percent of the care provided by family and friends. Average nursing home costs per year run from $42,000–$70,000.[2] Recently, special care facilities for those with impaired memory have been developed. These special care units provide programs that tend to meet the needs of patients with AD and are becoming more and more popular and in demand. In 2000, Medicare costs for AD patients was $31.9 billion. In 2010, the cost is estimated to be $49.3 billion. Medicaid residential costs will go from $18.2 billion in 2000 to $33 billion in 2010.[3] AD creates a real crisis for the nation now and will increase in costs with the aging of the baby boomer generation.

DIAGNOSTIC UPDATE

Probably the most promising and significant event in the identification and treatment of AD is a change in the approach to the diagnosis of dementia. In the past, the process of diagnosing AD consisted of a brief interview with the patient and the patient's family members. Family members were asked to identify particular memory loss situations, such as misplacing car keys, as well as such problems as word finding and orientation confusion. Often, family members reported different levels of impairment.

The identified patient was then administered some type of memory and cognition test. This was usually the mini mental status exam (MMSE).[4] The MMSE is at best an inexact and limited measure of cognitive ability. Administration time takes about five minutes and consists of questions about date and place, an auditory immediate memory test, a task to measure attention and calculation ability, questions and tasks to assess language ability, and a visual-motor integrity test. This test is the most commonly used instrument to evaluate cognitive abilities, and was developed primarily as a screening device. A total of 30 points is possible. The test has norms for age and education level;

however, often these are not used. A score of 24–30 indicates intact cognitive abilities. A score of 20–23 suggests mild impairment, 16–19 moderate impairment, and 15 and below severe impairment.

However, test norms do not consider physical disability that may make task completion difficult, sensory disability, emotional state, sociocultural differences, and a variety of other factors, which often result in false positives. Individuals who do poorly on the MMSE and other similar instruments do not necessarily suffer from dementia. However, in the past, a brief interaction with the family and one with the identified patient resulted in the diagnosis of AD. False positives based on an inadequate diagnosis not only result in the true problems or causal factor of symptoms not being treated, but also have a tendency to be a self-fulfilling prophecy. The individual and family members tend to be devastated. The result often is depression and failure to provide an environment for intellectual stimulation and well-being.

Placement in daycare or permanent living facility is common based on the conception that indeed the person has AD and will only get worse. A limited evaluation fails to differentiate between treatable forms of dementia and irreversible AD. The question arises, "Why would a professional health provider rely on limited data when comprehensive diagnostic testing is possible?" There are a number of reasons.

One reason is limited time. The primary care physician is expected to provide a wide range of diagnostic opinions and treatment for a variety of health problems. Time is not available to conduct a comprehensive diagnostic evaluation for AD. A second reason is limited knowledge and ability to provide such an evaluation. Physicians are specialists. A cardiologist does not diagnose or treat cancer. It would be rare to find a physician who has the training and experience to conduct a neuropsychological evaluation, a comprehensive and complete pharmacological review, an evaluation of functional abilities, and a diagnostic work up of mental abilities, and also emotional and mental illnesses which may result in dementia.

A third reason is the fact that medical doctors tend to hesitate to refer outside of the profession. AD is a progressive physical (organic) disorder. Initially, AD was considered a normal aging process or a weakness of old age. However, research as far back as the 1970s suggested structural pathology with neuronal plaques and neurofibrillary tangles.[5] The proteins ACT and ApoE4 were suspected to be related to these conditions. (More information will be discussed in the chapter section on recent research and treatment.) A deficit in the neurotransmitter choline acetyltransferace was also suggested, as was brain atrophy.

It would seem that because AD is indeed an organic brain syndrome, laboratory tests would be available to diagnose the disorder. Neurologists certainly do

play an important role in the diagnostic process to rule out other causes, such as brain injury or tumors. However, diagnosis can only be made on a behavioral basis, just as schizophrenia and chemical imbalance depression are diagnosed using clinical observation and behavioral tests, not medical tests.

The hesitation of physicians to utilize other professionals in a multidisciplinary approach may be related to lack of awareness that accurate and reliable objective tests and measures are available, problems in linkage with other professionals, and possibly an attitude that is common in our society—the attitude or belief that nothing can be done about dementia and that it is a symptom and part of aging. Baby boomers will not stand for this and will insist on more comprehensive and complete diagnostic processes and care. Another reason for an incomplete diagnosis and evaluation of dementia is lack of availability and training in the related professional fields. Geriatric neuropsychologists are rare. Doctors of pharmacology, until recently, have not been involved in the diagnosis and treatment of geriatric patients specifically. Case workers to monitor response to treatment and supervise care programs are scarce. Another reason is cost. A comprehensive evaluation involves a number of specialists. Not only must arrangements be made for appointments, but the compilation of data into a meaningful whole with a treatment plan must be arranged. While Medicare and Medicaid pay for many of these services, these services require a physician's referral. Billing is also complicated.

DIAGNOSTIC SPECIFICS

This section will discuss the role of each of the specialists in the diagnostic process and specifics as to areas of attention.

The physician's involvement in the diagnosis, treatment, and care of AD is key and critical. Usually the first contact for an evaluation is made with the primary care doctor. The American Psychological Association, in *Guidelines for the Evaluation of Dementia and Age Related Cognitive Decline*[6] published in February 1998, states that psychologists performing cognitive decline evaluations should inform the referring physician as to findings. In the case of the first contact being with the psychologist, it is important that a contact be made with a medical professional to evaluate and discover any medical disorder or reversible medical cause for dementia. The guidelines stress the importance of a multidisciplinary effort, cooperation, and respect.

The Alzheimer's Association guidelines suggest physicians use available diagnostic data from appropriate specialists in such fields as neurology, psychiatry, and neuropsychology to diagnose dementia. The Association states that data should include a medical history and evaluation of mental status, communication ability, and tests of memory, reasoning, visual-motor skills, and

language skills. A physical exam including nutrition, blood pressure and pulse, and the evaluation of functions of the nervous system is suggested, along with laboratory tests to provide information on other medical problems, as well as an assessment of emotional status.

Over 50 physical illnesses and conditions present symptoms of dementia. Some of these include: anoxia, anemia, congestive heart failure, vitamin deficiencies, stroke, head trauma, acquired immune deficiency syndrome, other infections, neoplasm, cerebral vasculitis, multiple sclerosis, Cushing's syndrome, hyperthyroidism, hypothyroidism, dehydration, Huntington's syndrome, and Parkinson's disease. This list emphasizes the need for a complete medical evaluation. If the symptoms observed are motor problems, problems with gait, disinhibited behavior, depression, anxiety, patchy or focal neuropathy with intact language and memory, maintained ability to learn, orientation and intact executive functions, a diagnosis other than AD is probable.

Forms of dementia other than AD tend to present specific laboratory findings which help in a differential diagnosis. For example, vascular dementia presents focal neurological signs and symptoms. Magnetic resonance imaging (MRI) and computed temography (CT) usually demonstrate multiple vascular lesions of the cerebral cortex and subcortical structures.

DSM–IV[1] gives extensive information as to the determination of whether the dementia is due to general medical conditions. Of course, the physician is the appropriate health provider to make this determination. A pharmacological consult is usually of benefit as part of the diagnostic process and in planning treatment and care. Clinical evidence suggests that the elderly are often overmedicated. Confusion problems with memory disorientation and problems with functioning can be long-term side effects of both medical and psychotropic drugs. The withdrawal from the market of a number of prescription drugs because of increased risks has become more frequent. Consumer advocate groups claim that pharmaceutical companies withhold negative research results, and that the manufacturer's finance of studies related to the efficacy and safety of new drugs create doubt as to consumer safety and welfare. Escalating prices of prescription drugs well above the level of inflation also creates concern, especially when low-income families have to choose between food and medication.

The fact that many prescription drugs sold to the American public are significantly more expensive than those sold in Canada and other countries also appears to have raised resentment and concern. In April 2005, AARP's annual "Rx Watchdog Report"[7] stated that brand name prescription drugs in 2004 increased an average of 7.1 percent in price. This was the largest price increase in five years. The price increase was more than double the national rate of

inflation for 2004. In 2003, the price increase was 7 percent. Since 1999, the price of over 150 popular brand name drugs increased 35.1 percent, nearly three times the inflation rate of 13.5 for this five-year period. Research published in the February 2005 *Journal of the American Geriatric Society*,[8] based on data of 175,000 adults enrolled in health maintenance organizations (HMOs), indicated that 28 percent of elderly individuals were prescribed at least 1 of 33 medications considered inappropriate.

Pharmaceutical companies claim that an increase in longevity is related to pharmacological intervention. Other research studies relate this to earlier diagnosis of medical problems and improved lifestyle. Studies have suggested that, indeed, exercise, good nutritional habits, intellectual involvement and stimulation, not smoking, and limiting alcohol intake does decrease the risk of developing dementia. This appears to be related to maintaining good health and a good attitude so the body functions in a healthy way. Prevention based on a healthy lifestyle, rather than intervention and medication seems to make sense.

When prescribing drugs for the elderly, distribution, metabolism and excretion differences, as related to the aging process, must be considered. Distribution of drugs is altered primarily by loss of body water and lean body mass. Metabolism varies between individuals. Monitoring of the process and drug impact is best done on an individual basis. Body weight, general health, and liver problems are some of the factors affecting drug reactions. Excretion is related to kidney functioning, with documented reduction in the glomerular filtration rate with age.

Other concerns and risk factors related to the elderly have to do with memory problems and proper dosage, time of medication, and taking the wrong medication. Lack of monitoring of side effects is common with the elderly patient, either failing to identify side effects or failing to inform others of negative side effects. Lack of monitoring and supervision is common, not only among individuals living independently, but also in nursing homes and other facilities such as assisted living homes.

Failure to contact medical caregivers on a regular basis can result in prescription drug misuse. In institutional settings, there is often a lack of consistency of medical care with visits by different physicians throughout one's stay. It is not uncommon for drugs once prescribed for a particular illness or symptom to be continued when no longer needed. Abuse of drugs, including pain medication, sedatives, and alcohol is a danger with the elderly. One study[3] suggests alcohol abuse by 2.8 percent of the general public over age 65. This is probably an underestimation.

All medications have side effects. Drugs which present symptoms of dementia include antihypertensives, corticosteroids, digitalis, opiates and synthetic

narcotics, and psychoactive agents with anticholinergic properties. Side effects of antidepressant drugs can include sedation, hypotension, and anticholinergic impact. Neuroleptic drugs also can cause these side effects, plus extrapyramidal symptoms. Liver disease concern is related to certain anticholestral drugs, as well as medication for bipolar disorder. Antianxiety medication can be addictive. Weight gain is associated with many antidepressants, as well as some neuroleptic medications.

In a perfect world, monitoring of side effects, supervision to provide medical compliance, and the prescription of proper medication would be standard. Some facilities do provide pharmacological review on a regular basis, but generally drug misuse and abuse is common with the elderly. This is one reason that a pharmacological consult is recommended as part of the diagnostic process when evaluating symptoms of dementia. While a review of medication is important, it is just as important for family members of individuals with functional problems and/or dementia to monitor medication taken. Questions to ask one's physician include:

1. Why is this medication prescribed?
2. What are the desired effects? How are the effects monitored and by whom?
3. Are there other forms of treatment?
4. What are the risks and side effects?
5. What are the interactions with other medications being used?
6. How will changes in health and physical conditions change the effectiveness and the side effects?
7. How long will this medication be used, and how often will its use be reviewed?
8. What will be the cost of the drugs? Are there generic forms of the drug available, and are there cheaper sources for the medication?

Family members can also be of help to the physician in prescribing proper medication by reporting any history of drug abuse or dependency by the individual family member being evaluated. Hoarding of drugs, uncontrolled dose escalation, or obtaining drugs from multiple physicians should also be reported.

NEUROPSYCHOLOGICAL EVALUATIONS

As an aid in evaluating dementia and AD in particular, psychological and neurological evaluations are suggested not only by the Alzheimer's Association, but also by the American Psychological Association[6] and in *DSM–IV*.[1] This evaluation should include information as to intellectual abilities, cognitive abilities, emotional state, and functional level. This data is vital in arriving at an accurate

diagnosis, as well as in making determinations as to treatment, management, and care. In most cases of diagnosis, brief mental status evaluations are inadequate instruments. False positives are common. Little data as to status of intellectual, cognitive, emotional, and functional ability and impairment is derived.

AD is an organic brain disease and requires tests for a wide range of multiple cognitive domains, including memory, attention, motor and perceptual skills, abstract and pragmatic reasoning, visual-spatial abilities, problem solving, and executive functioning. Too often diagnosis procedures are limited and performed by individuals with little training or background and experience in evaluating dementias.

Although research is being carried on at this time, there are no conclusive biological tests or markers short of autopsy to diagnose AD. Neuropsychological evaluations allow for differentiation between the forms of dementia, discriminating between dementias that are age-related, due to general medical conditions including other central nervous system conditions, systemic conditions that cause dementia, persisting effects of a substance, or emotional disorders such as depression which causes cognitive problems.

With the development of biological markers in the diagnosis of AD, a neuropsychological evaluation will still be important to assess pre-morbid abilities, onset of dementia, the functional aspects of the disease and level of impairment, a prognosis for the future, and identification of spared resources and abilities to provide for treatment and care.

Neuropsychological evaluations are based on standardized, reliable, valid tests and procedures, rather than a cursory examination and subjective diagnosis. The data obtained from a comprehensive evaluation provides the physician with data to make an accurate diagnosis, as well as information for treatment planning and care.

The use of psychometric tests is limited to those with extensive training and experience by licensing law. Guidelines for training and practice have been developed by the American Psychological Association.[6] One of the guidelines is that psychologists gain specialized competence. Competence in administering, scoring, and interpreting psychological and neuropsychological instruments in performing clinical interviews, determining which tests are best suited to the particular situation, and communicating the findings of the evaluation in a clear and comprehensible manner are all important. Advanced continuing education, training, and experience in the areas of gerontology, neuropsychology, and rehabilitation psychology are often pursued in order to maintain a level of competency and clinical ability. Education of other health care professionals about the limitation of brief screening devices and the need for more comprehensive evaluations is also suggested in the guidelines. These guidelines

facilitate the achievement of the purpose of a neuropsychological evaluation, which is to aid in diagnosis, establish baseline performance, estimate the prognosis, and develop a treatment plan.

Areas of consideration in a neuropsychological evaluation usually include an estimation of pre-morbid intellectual abilities and current ability. Cognitive ability, resources, and limitation data include:

- Orientation
- Attention span and concentration
- Memory abilities

  Immediate memory
  Short-term memory
  Long-term memory
  Working memory

- Incremental learning ability
- Thought processes

  Psychosis
  Delusional thinking
  Abstract reasoning
  Pragmatic reasoning
  Problem-solving ability
  Ability to comprehend rational explanations

- Executive functioning

  Organization ability
  Planning ability
  Sequencing

- Expressive language ability

  Productive language
  Aphasia
  Agnosia
  Oral language
  Written language

- Receptive language

  Comprehension
  Perception

- Emotional state

Another area of evaluation, which is helpful in the diagnosis and care planning, is functional ability related to daily living skills. Some of this information

can be obtained from family members. Meeting with the family is important in obtaining family history, as well as information about cognitive ability and impairment and functional ability. Information often differs from one family member to another and must be analyzed and considered for validity.

Functional ability evaluation include:

- Self-maintenance

  Physical functioning
  Personal care and hygiene
  Dressing and grooming
  Nutrition
  Speech and language ability
  Eating habits
  Maintenance of personal possessions
  Ability to use medications
  Health maintenance

- Social functioning

  Interaction with family
  Social skills
  Relationship with friends
  Peer group involvement
  Leisure and recreational involvement
  Use of alcohol and mood altering drugs

- Community living activities

  Homemaking skills
  Use of transportation
  Ability to shop for self
  Independent travel skills
  Ability to avoid common dangers
  Use of community services

The results of all types of psychological and neuropsychological tests are impacted by a variety of factors which must be taken into consideration in scoring and in determining validity and accuracy. This is especially true in evaluating the elderly. Factors include visual acuity, auditory acuity, gross and fine motor skill and ability, illnesses which interfere with test performance, emotional state at the time of testing, cultural and native language differences, and other conditions and environmental situations that have not been mentioned. In order to obtain an accurate evaluation, the examiner should consider confabulating factors and provide for a test experience which will allow the subject the fullest opportunity to succeed.

Specific parts of a neuropsychological evaluation usually include identifying data, tests and procedures used, any unusual or disturbing testing factors, referral and background information, mental status and behavioral observations, the diagnostic interview, a family interview, assessment results, a diagnosis, and recommendations. The form and specific tests of a neuropsychological evaluation vary with the examiner. However, the goal is to provide data as to intellectual, cognitive, and functional state, as well as emotional status to aid in diagnosis, treatment, and care.

A final consideration in the diagnostic procedure and follow-up using a multidisciplinary approach is to include a case manager. Treatment and care often require the services of a trained specialist such as a social worker, therapist, counselor, or psychiatric nurse. This need will be discussed in treatment and care.

Earlier in this chapter it was mentioned that a major breakthrough in the diagnosis of dementia (and AD in particular) has been the development and implementation of a multidisciplinary evaluation approach. AD continues to be an overdiagnosed and misdiagnosed disease because of the use of inaccurate and invalid assessment and evaluation techniques by many practitioners. Progress; however, is being made. This is evident from the development of facilities (especially at teaching hospitals) which use the approach, methods, and procedures discussed in this chapter. This trend will continue and result in better diagnostic methods, treatment, and care.

A sample of a neuropsychological assessment follows:

Neuropsychological Assessment

Name:
DOB:
Date of Evaluation:
Evaluator:
Referral:

Tests and Procedures

Chart Review
Staff Interview
Interview with Family
Mental Status and Behavioral Observations
Guilford Physical Complaints Checklist
Guilford Self-Rating Symptom Checklist
Geriatric Depression Scale
WAIS-III

    Digit Span Test
    Comprehension Test

Bender Gestalt Test—Partial
Boston Naming Tests
Boston Aphasia Tests

>   Visual Confrontation Test
>   Sentence Reading and Comprehension Test
>   Expressive Language Test
>   Categories Test
>   Comprehensive Language Test

Fairfield Geriatric Rating Scale
Blessed Dementia Test

REFERRAL DATA

The subject is a 76-year-old white female who was admitted to _____ Memory Impaired unit on January 30, 2003. Prior to that time, she had been living at home with her husband. The husband reported that about two years ago his wife began to develop signs of dementia, including problems with memory, disorientation, confusion, and impaired executive functions. The husband cared for the wife until January of this year, when it was determined that she would benefit from placement. A neuropsychological assessment was ordered because the onset and progression of the patient's dementia appeared to be atypical. As will be discussed in depth, the symptoms, behaviors, and functional disability are very severe and significant for one who, according to the husband's reports, was fairly functional a few years ago.

At the time of testing, the patient was described as agitated, restless, and irritable. Reportedly, she is confused and disoriented. Often, when wanting to relieve herself, she takes off her clothes in the hallway. Allegedly, she has become physically assaultive with staff.

At the time of testing, the patient was taking Aricept and Zyprexia, which reportedly have been of benefit. The husband stated that until two or three years ago, his wife still worked, was socially involved, and functional. He was vague about specifics, but stated that prior to the patient's deterioration, she had some visual problems with her left eye. The patient's recent medical history is unclear; however, it is possible that her problems are related, at least in part, to cardiovascular insult or injury and/or organic brain syndrome.

Mental Status and Behavioral Observations

The patient is a large woman who appears as her stated age. She was assessed at the facility. During the evaluation, the husband was present. The patient tended to rely on him for information; however, she was instructed to answer the questions initially on her own. His presence was helpful to verify

the responses. The patient was unable to answer simple questions or provide much accurate information. She has significant problems with word finding and oral and written expression, which leads this examiner to suspect a transient ischemic attack (TIA) or stroke and/or organicity. She also has problems with receptive language. Questions had to be repeated and explained. Often, she lost track of instructions. She was unable to complete sequential tasks or understand simple instructions or explanations. There were signs of perceveration as well as frustration when she could not complete a task. She became especially agitated when unable to put into words her thoughts or find words. However, she was cooperative. It is important in interactions with her to be patient and not rush her. Under pressure, she decompensates. This is why she at times acts out. She is confused, disoriented, and frustrated. Directions and instructions will have to be repeated because of problems with memory and comprehension.

Diagnostic Interview

The patient did not know her age, the date, or the other specific information, including how many children she had. Her husband said that often she does not know who he is. She said that she thought she had four or five sons and one daughter. She did not know how many siblings she had. When asked, she said, "Just about all of us."

She said that she "felt good" and that the food was "good." When asked about her daily activities, she said that she was "just here." She does not appear to be depressed, but more agitated and restless. This is common in late-stage dementia.

Test Results

The patient obtained a score of five out of 30 on the Folstein, which suggests severe dementia. Same age-education cohort score is 27, with 25 the 25th percentile score. She is disoriented as to time, place, and person. She had significant problems with completing test tasks because of problems with comprehension, as well as focus and attention. She is easily distracted; however, when given cues and with repetition of instructions, she performed more adequately. Immediate, short-term, long-term, and working memory impairments are significant. She is unable to learn and retain new information, which makes behavioral management difficult. It is important to make sure that the patient understands by looking directly at her and being specific and direct in communication. Because she displays significant problems with receptive language,

even simple explanations are often not understood. Repeating instructions and directions in basic terms is suggested.

The patient appears to be suffering from agnosia and has problems with written communication, both reading and writing. She can read simple words and knows letters and numbers, but does not understand the meaning of what she reads. Visual motor integrity problems, as well as language problems, suggest organicity. She scored significantly below average on the WAIS tests that measure memory and common sense. She has problems with executive functions, such as planning, organizing, and completing sequential tasks. Her score on the Blessed Dementia Rating Scale suggests severe functional disability. She has significant problems with memory and performance of every day activities and needs direction and help. Poor performance on the Boston Aphasia and Naming Tests support the diagnosis of severe cognitive impairment.

Diagnosis

294.8 Dementia Not Otherwise Specified (NOS)[1]

The patient's dementia is atypical, although there are symptoms of disorientation, impaired memory, aphaisa, apraxia, agnosia, impaired expressive and receptive language ability, problems with attention and focus and executive functions, and problems with self care. She does not appear to be depressed, but more accurately agitated, and at times aggressive because she is confused, disoriented, and frustrated. Because of the rapid deterioration of the patient's abilities and rather sudden onset, organicity is suspected, with possible cardiovascular insult or injury or structural brain damage.

Recommendations

The medication reportedly is of some benefit to the patient. Of course, all medical decisions must be made by the patient's physician. Behavior interventions include realization that she tends to decompensate under stress or pressure. She requires a calm environment, without being pushed beyond her capacities. She also is bored. Activities, such as looking at magazines or pictures, seem to interest her. During the neuropsychological assessment, she appeared to like to have a pen in her hand and write or draw on the paper. Do not expect her to interact as she did in the past. Just sitting with her and touching her can be helpful, or even just being with her in the same room. A complete medical exam, including a consult with a neurologist, is suggested.

TREATMENT: BASIC CONCEPTS AND RECENT RESEARCH

The *DSM–IV*[1] differentiates between forms of reversible and irreversible dementia. The irreversible dementia includes AD, vascular dementia and dementia due to HIV disease, head trauma, Parkinson's disease, Huntington's disease, Pick's disease, and Creutzfeldt-Jakob disease.

In the case of diagnosis of vascular dementia, there must be evidence of cerebrovascular disease. Symptoms are usually very specific and focal. Treatment of hypertension and vascular disease are very important in preventing further trauma and injury. The involvement of a neurologist and the use of CT or MRI examinations are important. Causal factors usually include multiple strokes with multiple lesions.

Dementia due to HIV disease is characterized by memory, thought, and problem solving ability impairment. Anoxia and motor problems are related symptoms, with depression common. Great gains in treatment have been made over the past years utilizing pharmacological and psychological intervention strategies for HIV disease. Head trauma dementia varies in impairment and dementia symptomotology, depending on the type and extent of injury. Amnesia, aphaisa, anxiety, mood lability, and problems with attention and concentration are common. The dementia is usually not progressive as it is with AD, and some abilities, such as language skills often return during the first six months following an injury. Again, the skills of a neurologist are important in determining the extent and type of structural injury. Treatment using physical, occupational, and language therapists is common.

Parkinson's disease is a neurological disorder that is progressive with tremor, rigidity, and balance problems. Symptoms of dementia, especially in elderly patients, are frequent with executive function impairment and problems with memory. Depression tends to coexist. Huntington's disease is inherited. The disease presents with problems in judgment, memory, and executive functions with disorganized speech and irritability common in late stages. Like AD, the disorder is progressively debilitating. Genetic testing and family history are used for a differential diagnosis, in that 50 percent of the children of individuals with Huntington's develop the disease.[1]

Pick's disease is a degenerative brain disease. Problems with memory, attention, and language are primary cognitive symptoms. While the differentiation between AD and Pick's is difficult, a neurological examination tends to discover frontal and temporal lobe damage most significant. Creutzfeld-Jakob disease is an insidious infectious disease with rapid progress. It too is irreversible. Extrapyramidal signs tend to appear with burst suppression electroencephalogram activity and myoclonia.

The importance of the involvement of a neurologist in the evaluation of dementia is illustrated above. However, it must be pointed out that in the normal aging process some brain atrophy and neuronal plaques and tangles are present. Extensive research is exploring this condition in an attempt to differentiate between AD, other dementias, and general medical conditions that present with symptoms of dementia.

The question may arise, "Why is a differentiation diagnosis necessary?" The answer is that many diseases and disorders can be treated. As of this date, there is no treatment for AD. An accurate diagnosis is important to obtain treatment for reversible dementias and disorders presenting with AD symptoms. Diagnosing AD also allows for care and management, as well as for research in the areas of prevention, treatment, and care.

Identification and treatment of dementias due to other general medical conditions (see previous text discussion), substance-induced persisting dementias, and medical/physical diseases and disorders presenting dementia symptoms relies on the medical practitioner and professional. As has been emphasized, ruling out these diseases and disorders is the basis for identifying AD. AD misdiagnosed leads to failure to treat. A medical exam alone fails to provide data for diagnosis of AD as well as identify impaired versus spared abilities and resources which can be used and built on to improve the quality of life for the patient with AD.

Psychological and emotional disorders or problems are often coexistent with AD, can present symptoms of dementia, or can interfere with the diagnosis of dementia. A psychological evaluation can be a part of a neuropsychological evaluation or performed by a psychiatrist or psychologist at a different time and setting.

A patient who suffers from anxiety can have problems with an evaluation. Problems with attention and focus, decompensation, and confusion because of stress often result in significantly poorer performance than if the subject is not suffering from anxiety. This is one reason why it is important to establish rapport with the subject. A clinical interview when conducted in a compassionate, unhurried, supportive manner can produce an atmosphere conducive to testing and allows the subject an opportunity to do well. Research has documented that memory and performance problems tend to develop when the individual is rushed, under stress, or anxious. Elderly individuals often need more time for recall. This is one reason that simple screening tests such as the MMSE are often inaccurate.

The individual tested tends to feel pressure. Also, in many cases, major life situation decisions are made based on the results of a 15-minute evaluation. These include decisions as to driving rights, competency, and living arrangements or placement. Those with AD tend to be anxious and agitated based on the fact that they are confused and disoriented. Inability to understand what is happening, problems with following directions, and problems completing tasks

lead to frustrations and often agitation. Not only is agitation common when asked to perform a task in testing, but agitation and anxiety also tend to be a primary emotion with AD. Managing agitation is one of the main concerns in care taking and will be discussed later in this chapter, as will be suggestions on how to communicate with a patient with AD.

It is estimated that 16 to 20 million Americans suffer from depression.[3] An even larger number of people live with anxiety disorders. The elderly tend to have more emotional problems, particularly with anxiety and depression, than younger individuals. This is due to elements of loss related to physical impairments and disability, health concerns, physical problems, and loss of prestige, role, loved ones, and support systems. Diagnosticians must be aware of a subject's mental and emotional state. Because depression presents many symptoms of dementia, the disorder is often called pseudodementia. Problems with memory, attention, concentration, and orientation are common in depression.

Anxiety and depression are sometimes preexisting or coexisting with AD, and must be treated separately, either pharmacologically, psychologically, or both. Side effects of the drugs must be considered. Antidepressants can cause sedation, hypotension, cardiotoxicity, and anticholinergic side effects. Antianxiety medications tend to be counterindicated, especially in dementia, because they often cloud sensorium, can be addictive, and cause ataxia and impaired memory.

A trial and error study of use of medication with the elderly population, without experience in geriatric pharmacology and without an effective system in place for monitoring impact and side effects, can lead to detrimental results. Paranoia is fairly common with the elderly. Sensory loss (visual and auditory) and social isolation and withdrawal increase the risk for developing symptoms. It has been estimated that 20 percent of the individuals with AD suffer from paranoid symptoms.[3]

Alcoholism and drug abuse often increase with aging due to depression and anxiety, isolation, boredom, and lack of social involvement. Preexisting personality problems and disorders tend to become more severe. The elderly seem to be less willing to seek psychiatric help than younger individuals. There is also a tendency for mental health professionals to prefer intervention with younger and physically healthy individuals. Hopefully this will change.

RESEARCH

Exciting news is available in the area of research. For the fiscal year 2003, the federal government estimates that over $640 million was spent on research for AD.[5] Since 1982, the Alzheimer's Association has awarded $165 million in research grants. In a research update as of January 2005 by the Canadian Alzheimer's Association,[5] it is reported that there is no cure for AD and that the

symptoms are irreversible. Also, there are no biological/physiological methods of diagnosing AD. As has been stressed, the process is one of ruling out causes of dementia that are related to other medical, systemic, substance induced, and emotional disorders. However, behavioral observations, scientific testing, and measurement of impairment are utilized, once the above-mentioned conditions are ruled out, to diagnose and manage AD.

Risk factors for AD include genetic disposition, age, previous head injury, Down syndrome, evidence of brain inflammation, and diabetes. Recent terminology includes the phrase mild cognitive impairment (MCI) as a condition that may lead to the development of AD. It is unclear as to whether MCI is actually early stage dementia or a disorder in and of itself.

Early stage AD is difficult to diagnose and differentiate from other forms of dementia or the disorder identified in *DSM–IV*,[1] being age-related cognitive impairment. Many claims for the treatment and cure of AD have been made; however, it is suggested that because AD is often misdiagnosed, the improvements in cognitive level and functional level are due to the successful treatment of a general medical condition that is actually not AD.

This same factor may apply in the focus on so-called ways to delay the onset of the disease. Healthy lifestyle factors indeed may result in physical and mental good health, but, again, there are problems in determining whether or not this delays AD. It most likely lessens the risk of developing disorders which cause cognitive decline. Intellectual stimulation and social involvement tend to create a healthier and better quality of life, but there lacks documentation that this reduces the risk of developing AD.

In the past, the primary cause of AD was suggested to be a deficit in the neurotransmitter acetylcholine which is important in memory and other cognitive processes. The Food and Drug Administration (FDA) has approved two classes of drugs called cholinesterase inhibitors to treat the cognitive loss symptoms of AD. Donepezzil (Aricept), rivastigmine (Exelon), and tacrine (Cognex) are available in prescription form to improve the maintenance of the level of acetycholine in the brain. Tacrine, however, is not as commonly prescribed because of risks of liver damage. Modest improvements for a short period of time have been reported, but no significant long-term benefit is documented.

These drugs are expensive, and like all medication, have side effects. However, it has been my clinical experience that many families are so devastated at having a member diagnosed with AD that any possible postponement of severity is considered to be of benefit. There is also the possibility that modest short-term improvement is a faction of wish fulfillment, and that any positive response is the focus of family attention.

More recently, research as to the cause of AD has focused on brain cell abnormalities and damage. In the healthy brain, a protein named beta-amyloid is split from a larger protein called APP. In the brain of those with AD, the enzymes that separate beta-amyloid from APP produce too much beta-amyloid, which results in high deposits of amyloid plaques. These plaques supposedly destroy nerve cells. Research is taking place to find inhibiting drugs to prevent beta-amyloid from splitting, to prevent amyloid deposits and to eliminate amyloid plaques. Clinical trials are now taking place. Success would be a real breakthrough, although there is still the question of the impact of plaques as a causal factor in AD. Research is also exploring how tangles of fibers inside nerve cells impact on dementia. Healthy nerve cells have tangles and plaques. The question is how these conditions affect the brain in those who develop AD. Another drug currently being researched is Alzhemed, which is claimed to prevent the soluble form of beta-amyloid from forming insoluble plaques. Clioquinal is another drug in research to test the hypothesis that copper, iron, and other metals in foods cause AD. The drug's purpose is to eliminate these from the body. At one time, aluminum deposits were thought to cause AD; however, this premise has pretty much been discounted. The herbal supplement Ginkgo biloba is also in clinical trial with the possibility that the product may delay AD onset.

Researchers are also involved in studies to combine cholinesterase inhibitors with other drugs like Memantine. Memantine is a drug which has been developed to eliminate toxic levels of glutamate. Glutamate is a chemical that is necessary for impulses to transmit across the junction (synapse) between cells. Glutamate leakage multiplies the risk of brain cell damage. Memantine was approved by the FDA in 2003 to treat advanced AD. Reducing beta-amyloid in the brain by injecting antibodies has been attempted; however, clinical trials have been discontinued because of the development of lethal brain inflammation in some participants. More recent studies have used naturally occurring immunoglobulin antibodies. Some improvement in cognitive functioning and a reduction of beta-amyloids have been reported.

Statins to slow the progress of AD is also being researched. Another trial is focused on a decrease in the abnormal level of beta-amyloids through the short-term use of statins. Anti-inflammatory medicine has been in research as an agent to treat AD; however, it has not been documented that taking anti-inflammatory medicine actually reduces the risk of AD or has any benefit in treatment. Stem cell research is also in progress.

A new test called biobarcode assay, which detects proteins in spinal fluid, is the focus of research as a possible biochemical indicator of early stage AD. The researchers claim that a protein called amyloid-beta-derived diffusible ligand (ADDL) is detected in all patients; however, that those with AD have increases in the level of ADDL as the disease progresses. This research is in early stage,

with a sample population of only 30 in the initial sample. The proponents of this test admit that more tests with larger samples are needed over time and that at this time there is no evidence that high levels of ADDL exist only in AD patients and not patients with other forms of dementia.[9]

This section on research is included to give hope and suggest that money and effort are being expended to develop biochemical ways of diagnosing, treating, and managing AD.

MANAGEMENT AND CARE

A comprehensive diagnostic process, including health professionals such as physicians (general practice, neurology, psychiatry), a pharmacologist, a neuropsychologist, and a mental health specialist in the field of social psychology will provide information in order for an accurate diagnosis of AD to be made.

Medical tests allow for the differentiation of general medical conditions which present symptoms of AD. These conditions can be treated. Emotional disorders and substance abuse or use can be identified and treated. Disorders that cannot be reversed such as vascular dementia and dementia from head trauma can be managed and attempts made to control further damage. Dementias due to multiple etiologies other than AD can be identified and treated or managed. In the case of AD, an accurate and comprehensive diagnosis can provide direction for management and care based on the development of a plan to provide the best quality of life for both the patient and loved ones. This plan should be based on spared, as well as impaired, abilities.

Research related to the situation and needs of those with AD and caretakers is proceeding to allow for ways to improve care and provide for the family in the process. Two particular areas of change and significance are related to in-home professional services, and in the event that in-home services are not possible, residential placement in facilities that focus on the special needs of the patient with AD and the family. Developing a cure and treatment program must be based on the individual's problems and impairments, as well as strengths. In order to determine the level of functioning, an evaluation as to daily living skills is necessary. Various formats for the evaluation of these skills are available.

An evaluation should include skills in personal hygiene, eating, and dressing. Other areas include skills in performing household tasks, coping with finances, shopping, driving, ability to find one's way in familiar settings and familiar streets, and the ability to grasp explanations.

The neuropsychological evaluation provides data for care and management based on the quantitative, objective test results. Information should include data on

orientation, attention and focus, memory, learning capacity, thought processes, executive functions, expressive and perceptive language abilities, and emotional state.

AD is a progressive degenerative disorder. Understanding the stage of degeneration and the related impairments will provide data as to current needs, as well as projected future condition and needs. From the time of diagnosis, the average life span of the individual is about eight years.

The stages of AD are:

Stage 1: No Cognitive Decline
Stage 2: Very Mild Cognitive Decline

> Complaints of forgetfulness
> Forgets names
> Loses items
> No objective deficits in employment or social situations
> Patient displays appropriate concern

Stage 3: Mild Cognitive Decline

> May remember little of passage read from a book
> Decreased performance in demanding employment and social situations
> Coworkers become aware of patient's relatively poor performance
> Difficulty finding words and names
> May get lost when traveling to unfamiliar locations
> Anxiety is common
> Denial is likely

Stage 4: Moderate Cognitive Decline

> Clear-cut deficits
> Concentration deficits
> Decreased knowledge of recent events in their lives and current events
> Difficulties traveling alone and in handling personal finances
> Recognizes familiar persons and faces
> Can still travel to familiar locations (e.g., corner drugstore)
> Withdrawal from challenging situations
> Denial becomes dominant defense

Stage 5: Moderately Severe Cognitive Decline

> Patient can no longer survive without some assistance
> May forget address or telephone number and names of close family members (e.g., grandchildren)
> Frequently disoriented to time or place
> Remembers own name and names of spouse and children
> May clothe themselves improperly (e.g., shoe on wrong foot)
> Needs no assistance with eating or toileting

Stage 6: Severe Cognitive Decline

Occasionally forgets spouse's name
Largely unaware of all recent events and experiences in his or her life
Retains some sketchy knowledge of his or her past life
Unaware of surroundings, season, or year
Sleep patterns frequently disturbed
Personality and emotional changes frequent (often occur at earlier stages)

a. delusions (e.g., spouse is an impostor, imaginary visitors, talks to own reflection in mirror)
b. repetitive behaviors—continual cleaning, raking leaves, or lawn mowing
c. anxiety, agitation, occasional violent behavior
d. loss of initiative, abulia, apathy

Stage 7: Very Severe Cognitive Decline

Inability to communicate, grunting
Incontinent
Needs assistance with toileting and eating
May be unable to walk
Focal neurological signs and symptoms common

Other factors important in care plan development and management relate to the patient's loved ones and their resources as well as needs. Caring for an individual with AD has a tremendous impact on family members, not only emotionally but financially, as well as in areas such as time involved, other family responsibilities, and interpersonal relationships. How each family member is affected depends on not only the individual's relationship with the patient, but the individual member's own situation, resources, and vulnerabilities. Often unsettled interpersonal problems exist not only within the family, but also with each family member and the person suffering from AD. These issues tend to become more obvious and stressful with the diagnosis of dementia.

The emotional responses of family members tend to parallel the patient's response during the stages of AD. They start with denial. This can be because of fear and lack of understanding. Denial tends to delay evaluation and care. The sooner a comprehensive evaluation is made, the sooner a diagnosis and treatment and care plan can be developed. The hope is that symptoms are not as extreme as suspected and that the condition is treatable and reversible. Confusion and anxiety also tend to be emotional responses of both the subject and the family. Symptoms of dementia can vary in intensity and duration during the course of the disorder. It is not uncommon for various family members to report different degrees of impairment and functional disability. Anger is another response, as is depression. The decisions related to care can result in feelings of guilt. While in-home health care and services are more and more

available to the family, the stress of caring for an individual with AD is often overwhelming. Indeed, the caretaker's day is a 36-hour day.

The family must consider what living arrangement is best not only for the patient, but also for the family. These decisions must be based on an accurate diagnosis of needs, abilities, and resources. This is where a trained professional case manager can help. Possible living arrangements include:

- Living at home independently
- Living with family independently
- Independent living at a facility
- Assisted living at home with family or in a facility
- Nursing home living
- Memory impaired facility living

Many services are available to allow the patient suffering from AD to continue living in the least restrictive setting. Home care services have been mentioned. Day care facilities are available, as is respite care to allow caretakers some relief. Visiting volunteer programs from such organizations as Meals on Wheels, local churches, and other groups have developed. The Canadian Alzheimer's Association is researching the significance to an individual in losing their driving privileges and how to provide people in this situation with transportation. Support groups, educational classes, and counseling are available to caregivers, often through local Alzheimer's Association chapters.

Because it is difficult for a caretaker to research costs, availability, and needs while fulfilling the role of primary caretaker, professionals such as counselors and case managers are often available. Their initial involvement and ongoing availability should be a part of the diagnostic, treatment, and management/care process and program. Again the good news is that such comprehensive help is becoming more and more available.

TECHNIQUES TO COPE WITH ALZHEIMER'S DISEASE IN THE FAMILY

The following coping techniques for family members and caretakers is included to give guidance, and in an attempt to help deal with stress and related emotional factors:

1. Become educated as to the nature, course, and treatment possibilities.
2. Seek expert advice—a complete physical and behavioral assessment might be necessary.
3. Be involved with the individual and treatment. Provide love and support.
4. Consider joining a support group.
5. Become aware of the behaviors in the family due to Alzheimer's and of your own feelings and responses.

6. Stay involved, but not too involved—use creative detachment.
7. Develop your own interests and activities away from home.
8. Eliminate feelings of guilt.
9. Use a stress management plan.
10. Change unhealthy rules, roles, and rituals such as codependency, covering up rather than seeking an assessment or help, or not allowing the individual to discuss their feelings and concerns.
11. Test reality. This means overcoming denial and planning for the future.
12. Deal with feelings of loss and grief. Individual counseling might be of benefit.
13. Open up communication with other family members regarding care, financial matters, and expectations.
14. Have faith. Twelve-step mottos such as *Let Go, Let God* and *One Day at a Time* might apply.

COMMUNICATING WITH ALZHEIMER'S PATIENTS

Care and management interactions and processes depend on communications between caretaker and the individual suffering from AD. Recognition that the Alzheimer's patient suffers from language, comprehension, and reasoning impairment is the first step in developing ways of communicating. The degree and type of impairment differs from individual to individual, not only initially, but as the disease progresses. Physical problems such as auditory impairment, dysphonia, and visual disability complicate communication. Failure to be aware of not only physical disabilities, but organicity related to the disease, tends to result in problems related to care and management, and complicates diagnosis and treatment.

During the early stages of AD, the patient often recognizes expressive language problems, especially word finding and being able to complete the thought process. This leads to frustration, anxiety, and depression in many cases. There is a tendency to withdraw and become reclusive. Caretakers are not to become frustrated. Having to repeat information and dealing with the individual's inability to comprehend simple directions and carry out simple tasks often leads to impatience and anger. It must be realized that inability to understand and comply, not intentional opposition, are the causes of these behaviors and communication problems.

Improving communication benefits both the caretaker and the patient. Even as the disability increases, there are basic techniques that can be used. Suggestions include:

1. Improving those impairments such as auditory disability and visual problems.
2. The identity of specific language and thought processing problems. Give the individual time to find words and cues to finish incomplete thoughts and sentences.

3. Be patient and nonconfrontational. Arguing about misinformation or inaccurate beliefs such as that a deceased spouse is still alive only creates more problems. Discuss past happy events and occasions.

4. Treat the individual suffering from AD with respect and allow for dignity. Persuade instead of giving orders. In times of anger or agitation, distract the individual rather than confrontation.

5. Find a quiet place in which to communicate.

6. Look directly at the individual and be sure that you have their attention.

7. Be specific and concrete. Individuals with significant cognitive and comprehension problems do not usually understand humor.

8. When giving direction, keep it simple. Use cues and break tasks into steps. Repeat and give step-by-step help.

9. Do not over estimate skills and ask a patient to perform tasks beyond ability, but do allow the individual to experience success by completing tasks within their scope of ability.

10. Consider the person's ability to tolerate environmental stimulation. Too many visitors at one time, task demands, or noise and confusion in the environment can result in decompensation which leads to agitation or aggression.

11. Individuals in a state of decompensation usually do not respond to reasoning. Removal from the area of conflict or confusion or a simple command such as "stop that" can help.

12. Use nonverbal methods of communicating such as demonstration or role playing when verbal methods are not understood.

13. Gentle, caring body contact such as a hug or a hand or one's arm are often understood and beneficial. Just sitting with a late stage Alzheimer's patient can have a calming effect, or talking softly or singing. Remember someone is at home even in a vegetative state. Treating that person with respect and love helps the patient as well as the caregiver.

DEALING WITH DIFFICULT BEHAVIORS

Developing communication skills and techniques is a start in dealing with inappropriate, dysfunctional, or dangerous behaviors and emotional states and responses that tend to be associated with AD. These behaviors and emotions include agitation, aggression, wandering, overdependency, inappropriate sexual acts, paranoia, depression, and anxiety.

There are a number of causal factors for problematic behavior. One is related to health factors. The side effects of medication can cause agitation, as well as such things as confusion, ataxia, and depression. This is one reason that medication should be reviewed by a specialist in pharmacology, as well as monitoring the efficacy of the drug and long-term maintenance dosage impact.

Impaired vision and hearing can result in confusion and disorientation. Interpersonal interactions and relationships are made difficult.

Acute illness not only causes physical problems, but also emotional ones such as depression, anxiety, lack of motivation, and withdrawal. Pain management is important, but can lead to sedation and an altered state of consciousness, as well as cognitive disability. Chronic illnesses have similar effects. Dehydration and constipation can impact on behavior as well as cognitive ability. Once these health factors have been identified, steps can be taken to treat the problem.

Environmental facts affect behavior and functional ability. Great advances have been made in providing surroundings that are not overwhelming, with cues for orientation. More and more facilities built to house those with memory impairments have therapy and activity programs to keep the patient settled and calm as well as occupied.

The environmental factors that lead to acting out are those that contribute to confusion, anxiety, and disorientation. An environment may be too large, cluttered, noisy, and disruptive. Environments with excessive stimulation result in patient decompensation. A structured and familiar environment does not cause the individual as much stress in that there is less need to act in new ways. Cognitive limitations make adaptation to unknown and unfamiliar situations difficult.

Another factor that contributes to behavioral problems and decompensation is presenting the patient with too difficult a task. Knowing the individual's abilities will allow for challenges which engage the patient, but do not overwhelm. Tasks can be too complicated and beyond cognitive ability, too involved with too many sequential steps, or not modified for physical disabilities and impairments. Communication problems have been discussed. The identification of the causal factors or triggers, and managing and controlling these factors so they do not occur or cause problems, can result in behavioral control.

Wandering is common among those suffering from AD. Causal factors include boredom, lack of exercise, and lack of goal-directed activity. Management includes planned security, exercise and activity, medication, reduced stress (noise, crowding, isolation), anticipation of needs and need provision, and the elimination of fear. Other specific actions that can be taken include recognizing hazards; secure the living area; notify staff; and prepare an individual patient management program, or if at home, notify neighbors and police, have a photo of the individual available, and secure car keys.

Agitation and acting out aggressively can take place in a locked facility;, as well as in situations of home care. Causal factors include confusion and overload with a catastrophic response, emotional factors or organicity. Management suggestions include remaining calm, maintaining eye contact, redirection and

rechanneling, reassurance, distraction rather than confrontation, removal of the stressors, and removal of the patient from the environment.

Medication may be necessary. Neuroleptic drugs were the drug of choice for managing agitation and aggression in elderly patients with AD rather than antianxiety medication. The newer medications tend to have fewer extrapyramidal side effects than the older class of antipsychotic drugs, but there can still be significant drug-related problems when using them. In May 2005, the FDA requested that manufacturers of atypical antipsychotics include warnings as to use of these medications with elderly patients suffering from dementia. These warnings include increased risk of death.

Overdependency, especially on one or more family members, is common in AD patients, and understandably so. The causal factors include fear, insecurity, confusion, and regression. It is often difficult to leave a loved one in the care of others. Daily twice daily visits and long stays ease one's feeling of guilt and concern, but may interfere with an individual's adaptation to a residential facility. Because the individual's memory and sense of time tend to be impaired, unfounded accusations of abandonment and neglect are common, causing family members or loved one's pain.

Management techniques include assurance as much as possible, realizing that rational arguments are often not understood or accepted. Limit responses to demands. Caretaker burnout can result in resentment for the caretaker, as well as development of health problems. If the individual is living at home, look into daycare programs. Respite care is available in many communities. Some churches and other organizations provide visiting volunteers. If the overly dependent individual is in a residential facility, provide them with security objects such as family pictures and items they can touch and hold. Pats and hugs from staff and attention help.

Inappropriate sexual behaviors can be related to continuing need for affection and intimacy or response to taclite stimulation. Common responses to being bathed or during toileting are anger, resistance, and agitation. These particular situations tend to be interpreted as intrusion. What appears to be a sexual behavior is not always sexual in nature. Tight underclothing can result in pulling, tugging, and touching oneself. Removal of clothing is usually not sexual, but due to discomfort of the clothes or just something to do. Understanding the intent in situations such as this allows for interventions such as use of other clothing that is loose and difficult to remove. Providing the individual with a pillow to hold and carry or stuffed toys sometimes help. In cases where the intent is indeed sexual, care must be taken, especially if another patient or staff member is approached. Correction and positive reinforcement of appropriate behavior might help. Monitoring the individual will possibly be necessary in an ongoing manner.

Paranoia and suspicion are related to disorientation, confusion, memory impairment, fear that needs will not be met, and preexisting personality traits exaggerated by age and cognitive impairment. Symptoms include isolation, accusations of staff, family, and others, hiding belongings, and anxiety. It is difficult to reassure such an individual or rationalize with them. Distraction sometimes works; however, the person tends to return to the subject and accusations as an obsession. Listening for a short time, but setting limits, is one intervention. Such behavior is irritating, but usually not dangerous.

Depression in aging, and especially with AD, is related to life-stage situation, as well as physical disability, pain, and chronic or acute illnesses. Other causes include cognitive impairment, with the realization that these impairments are significant and possibly progressive. Age-related losses, such as loss of the ability to drive, decreased physical stamina, loss of role and status, and loss of friends and loved ones exacerbate depression, as does concern about the future and financial status. In some situations, depression is a preexisting condition. Aging seems to exacerbate these emotional problems. A review of past psychiatric treatment and psychological functioning can provide data in order to properly treat these preexisting emotional problems. Management techniques of emotional problems might include increased involvement, physical activity, socialization, providing positive interaction with family and staff, attention, and love.

IN-HOME CARE OR PLACEMENT

A major decision faces every family concerning how to best care for the patient with AD as the disorder progresses. As was presented, AD is a progressive physical/organic illness, which is insidious and causes increasingly more significant impairment and disability as time goes by. These disabilities are those of impaired intellectual, cognitive, emotional, and functional capacity.

Initially, the disability will be minor, with problems in memory, orientation, and functioning. As the disease progresses, the disability becomes more severe, with the final stage one of vegetativeness. In the early stages, care focuses on quality of life issues and how to use spared resources and abilities, but in the late stages, care relates to hygiene and maintenance. At first, a family member or members and other loved ones may decide to care for the patient at home. Services are available to facilitate this; however, once the needs are evaluated and resources for care explored, the caretakers must decide who provides the care and how, when, and where.

A great deal of progress has been made in the last decade in providing in-home care. Long-term health insurance coverage in most cases allows for in-home care.

From a financial standpoint, as well as related to quality of life issues, it is beneficial to provide care in the least expensive and least restrictive setting. Outpatient services, such as the provision of psychological and psychiatric services, a neuropsychological assessment, and treatment planning can be coordinated with the AD patient at home, as can some medical services such as nursing care and therapy. Other services like companion care, shopping, food preparation, and cleaning help the patient live at home more independently. Some of these services are paid for by Medicare, Medicaid, or third-party service providers.

Individual communities, counties, and states offer benefit programs. A local case manager should have information on these services and can help the family research options and make care arrangements. Not-for-profit organizations also offer help. The Alzheimer's Association is a network of chapters providing educational services, support groups, and in some cases, programs including respite care. The Alzheimer's Association can be contacted by calling 1-800-272-3900 for a local chapter. The National Stroke Association deals with stroke victims and their families. The Area Agency on Aging and Aging Information Office provides services to senior citizens, including information on community resources. A great deal of information is available on the internet about AD, research, and services available.

Day care for individuals with AD is more readily available than a decade ago. These programs give the caretaker relief and also provide structured activities and a somewhat stimulating environment. A hot meal, social interaction, and activity programs are a part of most day care services. Because the needs and capacities of each individual with AD vary, it is important that the facility has an appropriate program and environment. Some individuals with AD will not be able to adapt to a day care program.

Respite care is short-term care, either on an inpatient basis or as an outpatient. Care is often available through a nursing home, in a hospital-related program, or as part of a residential care facility program. Medicare limits coverage to eighty hours a year.

Companionship care at home is another option which can be contracted for with a private agency. Quality of care and the training of in-home companions as well as costs vary widely. Researching and monitoring services is vital, as it is in all cases, not only of in-home services, but throughout one's stay at a residential facility. Quality of care is not necessarily guaranteed by an agency referral. The care is often better when a family member is available to observe and monitor services. Changes in patient ability and needs vary over the course of the disease and flexibility and changes in the care program will have to be made.

A patient with AD may require treatment or care in a hospital or nursing home if there are coexisting medical problems. However, in many cases, those

with AD can live in assisted living facilities or facilities for those with significant cognitive and functional problems, but having no need for medical care. More and more individuals live at home with family or a live-in caretaker until the end. At home, around the clock care may be necessary. Even in some residential facilities, a companion may be necessary. Most residential settings will not allow an unattended patient who is agitated with a risk of acting out.

A recent trend in facility housing has been care for the individual in a home-like setting. The emphasis is to provide for quality of life care. Living in such a setting will not slow down the process of AD, but will allow family, as well as the patient, the benefit of a program that recognizes the dignity and value of the individual. Cost, of course, can be an important factor in making decisions as to residential care and management.

SUMMARY

While AD is not reversible and there is no cure for the disorder, there have been significant gains in the diagnosis, treatment, and care of patients with the disorder. The diagnostic process has become more accurate and reliable, based on increasing realization that in the past, AD has been overdiagnosed and misdiagnosed. A multidisciplinary approach can identify medical, physical, emotional disorders, and problems that present symptoms of AD; however, there are in fact other forms of dementia that can be treated and often reversed.

A comprehensive approach to diagnosis, treatment, and management requires the involvement of professionals from such disciplines as medicine (especially psychiatrists and neurologists), the behavioral sciences (including neuropsychologists), pharmacologists, social science professionals, and health care case workers. An accurate diagnosis not only provides for treatment of other forms of dementia, but also provides data for the development of a care and management plan for the patient and information for the family.

A second area of progress is in the area of research, with the focus on prevention and possible reversal or cure of symptoms of AD. Third, quality of life issues have become more significant in care and management with in-home services often more available, as well as the provision of education and support for caregivers, through such wonderful organization as the Alzheimer's Association. Residential care facility options have grown, with an emphasis in home-like environment, socialization, and activities that allow for the patient's maximum utilization of resources and spared abilities. Staff training programs have become more sophisticated and available.

These are recent and significant changes, especially in the areas of diagnosis and research. Hopefully, progress will continue to be made.

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The Scientific Foundations of Gender Identity Disorders

Leslie M. Lothstein

In this chapter I will explore the phenomenon of gender identity within the context of the current dilemmas facing clinicians in evaluating and "treating" gender "disorders." It was the medicalization of the concept of gender that led to the view that variant gender identities were not normative, but aspects of an underlying mental illness. This conclusion was not based on psychological science but on conjecture, and has led, in some circumstances, to increased suffering of individuals with normative variant gender identities who were classified as mentally ill. Concurrently, other individuals who identified as transsexuals supported the diagnosis of mental illness so they could qualify for insurance reimbursement for sex reassignment surgery. Over time, the controversy has changed both with medicine's acceptance of the concept of transsexualism as a psychiatric diagnosis (as evidenced in the *Diagnostic and Statistical Manual of Mental Disorders*, Third Edition (*DSM–III*)[1] in 1980 and the *Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised (DSM–III–R)*[2] in 1984), and a retraction of that diagnosis in the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition (*DSM–IV*)[3] in 1994. With the emergence of the phenomenon of transgenderism, the rules have further changed. The controversy reflected the lack of real science in understanding gender-related phenomena, coupled with a challenge to the prevailing viewpoint that there were only two sexes and two genders (the gender binary hypothesis).

GENDER DYSPHORIA: THE EVOLUTION OF DIAGNOSIS AND THE MEDICALIZATION OF GENDER IDENTITY/ ROLE

Since 1980, the American Psychiatric Association's manual on psychiatric diagnosis (*DSM–III*,[1] *DSM–III–R*,[2] *DSM–IV*,[3] and the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, Text Revision *(DSM–IV–TR)*[4]) has listed gender identity disorder (GID) as an axis I psychiatric disorder, or mental illness.

In 1980, *DSM–III*[1] first identified the sexual diagnoses separately from the personality disorders. The current version, *DSM–IV–TR*,[4] published in 2000, defined GID as follows:

    I. Having a strong and persistent cross-gender identification (not merely a desire for any perceived cultural advantages of being the other sex).

In children, the disturbance is manifested by four or more of the following:

       1. repeatedly stated desire to be, or insistence that he or she is, the other sex
       2. in boys, preference for cross-dressing or simulating female attire; in girls, insistence on wearing only stereotypical masculine clothing
       3. strong and persistent preferences for cross-sex roles in make believe play or persistent fantasies of being the other sex
       4. intense desire to participate in the stereotypical games and pastimes of the other sex
       5. strong preference for playmates of the other sex

In adolescents or adults, the disturbance was viewed as manifested by symptoms such as a stated desire to be the other sex, frequent passing as the other sex, desire to live or be treated as the other sex, or the conviction that he or she has the typical feelings and reactions of the other sex.

   II. Having persistent discomfort with his or her sex or sense of appropriateness in the gender role of that sex.

In children the disturbance is manifested by any of the following: in boys, assertion that the penis or testes are disgusting or will disappear, or the assertion that it would be better not to have a penis, or aversion towards rough and tumble play and rejection of male stereotypical toys, games, and activities; in girls, rejection of urinating in a sitting position, assertion that she has or will grow a penis, or assertion that she does not want to grow breasts or menstruate, or marked aversion towards normative feminine clothing.

In adolescents and adults, the disturbance is manifested by symptoms such as preoccupation of getting rid of primary and secondary sex characteristics (e.g., request for hormones, surgery, or other procedures to physically alter sexual characteristics to simulate the other sex) or belief that he or she was born the wrong sex.

III. The disturbance is not concurrent with a physical intersex condition.

IV. The disturbance causes clinically significant distress or impairments in social, occupational, or other important areas of functioning.

GIDs were further characterized in terms of sexual attraction to males, females, both, or neither. While *DSM–IV*[3] lists the prevalence as 1/30,000 for males and 1/100,000 for females seeking sex reassignment surgery to change their bodies to match their subjective feeling of gender, these statistics have been called into question by Roughgarden[5] and Conway[6] who reanalyzed the available sex reassignment data and estimated that 1 of every 500 men and women are gender dysphoric. They view the *DSM–IV* statistics as incorrect and misleading. *DSM–IV* does not view intersex conditions with accompanying gender dysphoria (GD), transient stress related cross-dressing behavior, or persistent preoccupation with castration or penectomy without a desire to acquire the sex characteristics of the other sex as qualifying for a diagnosis of GID.

CHALLENGES TO THE *DSM–IV*

The core issue in the *DSM–IV*[3] diagnosis of GID is that it is a mental illness with impairments in social-emotional functioning, and having symptoms and beliefs that are abnormal. As a mental disorder, individuals with GID are labeled as emotionally ill and in need of treatment.

The prevailing view of GID as a mental illness was challenged from multiple scientific, cultural, political, neuroscientific, sociological, and psychological perspectives. Richard Green[7] provided scientific data suggesting that some childhood cross-dressing may actually be a marker for later homosexuality, which is not a mental illness. Gender research supports the view that gender exists along a continuum and is not a binary phenomenon, and that the term gender variant best describes the actual way in which individuals experience their gender. The illness model for GID as expressed in *DSM–IV*[3] needs to be reexamined as new scientific evidence surfaces. Indeed, there is a movement to eliminate GID as a psychiatric diagnosis in the *Diagnostic and Statistical Manual of Statistical Disorders*, Fifth Edition (*DSM–V*) which is soon to be published. Currently, some mental health professionals and members of the gay, lesbian, bisexual, and transgender (GLBT) communities have argued that it is time to rid *DSM–IV* of the diagnosis of GID because there is no hard evidence that it is a mental disorder. The arguments are scientifically persuasive. However, such a decision would also have serious social policy and economic implications for those gender variant individuals who seek psychological consultation or those self-identified transsexuals who want insurance companies or state and federal agencies to pay for their so-called illnesses.

The scientific literature on gender, however, has also noted a subset of individuals diagnosed with GID who do experience a persistent and chronic dysphoria about their gender. Those individuals were seen as at high risk for also having a major affective disorder (e.g., depression, anxiety, and bipolar disorder), suicidal thoughts and plans, and seeking ways to have hormones and surgery prescribed in order to change their body to fit their psychological feelings of gender.[8] In most cases, the dysphoria may be iatrogenic of the interface between their basic brain circuitry and society's phobia directed towards transgendered behavior, which in some cases has led to violence against transgendered individuals.

THEORIES OF GENDER IDENTITY FORMATION

There are many theories to explain normative gender development. For purposes of this introduction I will summarize some of the main findings in order to introduce the clinical issues to be presented later. This review is not meant to be all-inclusive.

While our current views of gender owe their roots to Freud's clinical insights on bisexuality,[9] the scientific foundations of our contemporary clinical understanding of gender identity phenomena relates to insights from child development, biology, the neurosciences, psychoanalysis, and family process all within the context of one's culture. The classical binary construct of gender that people are either male or female is being challenged by the above disciplines as gender identity is now viewed along a continuum with gender variance being the norm, not the exception. As we explore the new findings on the scientific underpinnings of sexuality, specifically gender, the argument will be compelling to reject the label of mental illness when referring to gender variant behavior.

Historically, the origins of gender identify is traced to Freud's notion of bisexuality, which challenged the then current social mores that maleness and femaleness were fixed traits, and challenged a simplistic binary theory of gender.[9] "The idea," he says, "that everyone is a mixture of male and female qualities was a revolutionary and liberating insight in a society committed to sexual purity and a rigid separation of the sexes, a society that was quite threatened by any mixing or blurring of sex roles" (p. 82). Freud's unfinished journey was that he failed to understand the meaning of his own insights that one's gender was not fixed but instead fluid. As a result, Freud became stuck in his culture's patriarchal view of sex and gender, and never really understood how rigid adherence to a male/female gender role damaged the self and could lead to psychosis.

BIOLOGICAL THEORIES

Sexual Circuitry Hormones and the Brain

The default sex for humans is female. Unless testosterone is added and the male hormone receptors are working, all fetuses will have a female phenotype. Chromosomal sex (46XX female and 46XY male) is only one factor determining what our bodies will look like. If male hormone receptors are not working, then men will develop female bodies (without ovaries or a uterus). However, their brains will remain male. This process is also true for women but in reverse.

Scientific studies have documented the structural differences between male and female brains, called sexual dimorphisms. LeVay[10] summarized the recent neuroscientific findings focusing on differences in sex and gender related to the following: the size of the brain; and structural differences in certain nuclei ("a cluster of cells that can be reliably identified on the basis of its size and position; and the appearance of the nerve cells forming it" [p. 132]) in the hypothalamus (the sexually dimorphic nucleus of the preoptic area identifying a cell group that is "structurally different in the two sexes" [p. 139] caused by circulating male hormone differences during the critical phase of intrauterine development). Moreover, the past two decades have produced a wealth of studies relating genetics, familial traits, fetal brain development (as a result of intrauterine neurohormomal processes), and other hypotheses regarding the scientific foundations of gender as based in the brain's neurocircuitry, involving both hardware and software. Functional magnetic resonance imaging (fMRI) and other neuroimaging studies have corroborated specific brain nuclei in the brain (the size of a grain of sand) as responsible for specific brain differences between males and female and within each group.[11]

The role of the hypothalamus (a small structure in the base of the brain) has been identified as critical in sex and gender development, including sexual arousal, gender, sexual orientation, and love relationships. Injuries or changes in specific hypothalamic nuclei provide access to understanding variations in behavior.[12]

Some of the recent findings include the following: the size of the INAH3 (the third interstitial nucleus of the anterior hypothalamus) seems to be involved in sexual differences and varies both with sex and with sexual orientation; male typical behavior has been associated with the size and structural/functional differences in the medial preoptic area; and female typical behavior is related to differences in the ventromedial nucleus. These nuclei in males and females, according to LeVay,[10] "seemed to be key sites of actions of the hormones" (p. 132). Other nuclei that appear to be implicated in sexuality and gender are deeper brain structures such as the amygdala, the septal area, the

bed nucleus of the stria terminalis, and the periaqueductal grey area (all of these nuclei are different in size, structure, and function for the two sexes). Other findings include the following: the anteroventral periventricular nucleus in females regulates the ovarian cycle and is larger in females; and the corpus callosum (responsible for social and interhemispheric communication) is larger in females. Additional studies that have focused on the sexual nuclei in the brain suggested that the medial preoptic nuclei in the hypothalamus was larger in males, and that male transsexuals and male homosexual brains are similar to females in certain structures. The ventromedial nucleus was viewed as larger in females and the anteroventral periventricular nucleus was responsible for the ovarian cycle. It is only within the past 20 years that a testes determining substance was discovered, called the HY antigen factor.[12,13]

Researchers have also pointed out the importance of the intrauterine milieu for fetal brain development related to later sex and gender. Subtle and overt differences in the fetal position in the uterus, temperature, and the site of implementation of the embryo or placenta blood supply can affect sex determination, arousal, sexual orientation, love relationships, and gender identity.[13] During each trimester of pregnancy, the brain's circuitry for arousal, sex, and gender are uniquely developed and patterned as part of the later software and hardware of the brain.[14] It is widely believed that it is within the intrauterine environment that the specifics of how gender and sexuality is organized are first established. The evolving brain circuitry and software/hardware development underlying sex and gender depends on the complex orchestration of the nuances of the individual fetus's intrauterine environment, bioavailability of sex appropriate hormones, chromosomal variances, and any subtle or gross effects of the environment (both internal and external) on behavior.

There are a number of neurohormonal syndromes that lead to atypical or variant gender behavior. The most notable are the following: congenital adrenal hypoplasia or androgen insensitivity syndrome (this disorder is what makes some men like Kim Novak, the actress, appear female, though they are chromosomal males; that is she has a 46XY male Karyotype, but her body was unable to use the androgen circulating in her blood); Turner's syndrome (girls with short stature, male appearing bodies and masculine behavior); and Kleinfelter's syndrome (men with quasi-female appearing bodies). All of these syndromes exist on a continuum with the individual's behavior ranging from phenotypically normative with regards to a general population to very atypical in terms of gender-sex appearance.[15]

Researchers are also looking at the effects of neurotransmitters on gender identity development. In one study on the effects of drugs on the intrauterine milieu and fetal brain development, Ehrhardt and Meyer-Bahlburg[12] concluded

that girl children born to mothers who took diethylstilbestrol were more likely than not to be identified as tomboys during latency. None of these girls had sexual orientation or severe gender role problems as teenagers. They were very masculine females during latency.

In 1968, Baker and Stoller[15] evaluated six male to female transsexuals who were found to have a variety of biological conditions hidden by psychological forces. In 1979, Stoller[16] reported on a female transsexual who was treated for a psychological disorder when it turned out that she had a rare enzyme defect, 17 B hydroxy deficiency disorder, that caused anatomic hemaphroditism and psychological distress. There are also cases of gender identity disorders that are related to genetically determined deficiency of the enzyme delta steroid 5 alpha reductase. In one study,[17] 38 children from the Dominican Republic who were raised as females became males when they entered adolescence, as the genes that trigger sexual differentiation were set into motion and their bodies masculinized with the onset of puberty. All of these girls knew they were boys (that is, they had male brains) and were not surprised by the transformation that took place during their teen years.

Sexual Orientation and the Brain

In males and females the nuclei of anterior hypothalamus seems to be critical in terms of sexual orientation.[18] Hamer and Copeland[11] now feel with 99 percent confidence that there is a little segment on X chromosome called Q28 which influences the sexual orientation of men and is a lot different than the same segment in women.

Many studies on sexual orientation have focused on the prenatal sexual differentiation of the brain and the influences during critical development of the intrauterine environment. Some researchers such as Cochran, Ewald, and Cochran[19] have implicated viruses as the possible culprit for sexual orientation during prenatal development. LeVay[10] concluded, "When future research has delineated the entirety of the sexually dimorphic circuitry within the human brain and has established which parts are not, it will be possible to form a more educated hypothesis about the brain basis of sexual orientation" (p. 132).

Arousal and the Brain

Sexual arousal has been associated with temperament, affective level of excitement, and neurobiological processes associated with brain development. All baseline sexual arousal is dependent on circulating testosterone in males and females, and the availability of the male and female hormone receptors to utilize the available male (testosterone) and female (estrogen) hormones.

Androgen receptor genes are viewed as responsible for the level and state of sexual arousal. The way the brain is structured, androgen receptors align on the midline of the brain, suggesting they are part of the very old and primitive building blocks of the human species. If we lower androgen levels in males from the normative levels of 300–1000 nanograms per deciliter of blood to prepubescent levels (less than 100 nanograms per deciliter, or what is normal for females), men begin to loose their sex drive. For men who are hypersexual, the introduction of an antiandrogen agent that blocks androgen uptake at the receptor level may lead to a sharp decline in arousal. This procedure is often used to control hypersexuality in sex offenders.[20]

Women who use steroids for body building or female transsexuals who receive testosterone injections (and block the effects of estrogen) all report increased sex drive, enlargement of the clitoris, and male typical arousal patterns.

Love and the Brain

Recent fMRI studies on love suggest that there may be certain brain centers that are responsible for our ability to fall in love. In Kleinfelter's syndrome, the genes responsible for this disorder also make it impossible for some individuals with Kleinfelter's disorder to ever experience falling in love. This finding raises some interesting questions about the neurobiology and neuroscience of love. Fisher's book, *Why We Love*,[21] studied the effects of brains in love by measuring blood flow via fMRI. Two areas of the brain associated with the reward system (Caudate nucleus) and the neurotransmitter dopamine (in the ventral tegmental area) were implicated in brain states of people in love. There is a neurobiology of love.

Cautionary Thoughts

While sex and gender are based on the neurocircuitry of the brain and brain hormones, this is not to say that parents and culture do not have an influence over their children in terms of appearance, dress, and role modeling for stereotypical male/female behaviors. What it means, however, is that the fundamental variance along the dimensions of arousal, gender identity, sexual orientation, and love relationships are primarily determined by the organization of specific brain circuitry during fetal development. Parental influences may help shape gender and sex, but they are not responsible for it.

Social-Cultural Theories

These theories focus on the nature/nurture debate, and regard the influences and effects of culture, family process, ethnic, religious, and spiritual process on gender development as being predominant. The most prominent

social theory in gender development was espoused by Money[22] who said that it was not the sex of determination at birth or the nature of the brain that was responsible for gender identification, but the gender in which the parents raised their child. Money viewed sex and gender as binary, and concluded that for male children with ambiguous, deformed, or absent genitalia, to be a boy or a girl you had to have the right sex organs. He argued that for children with inadequate or absent sex organs, if sex reassignment was done before age two (the developmental epoch in which the child can verbalize its gender) and the parents reared their male child as female (male), the child would become female (male). While this theory has been disproved, it served to generate a lot of cultural interest in the 1980s.

GENDER NONCONFORMITY: THE CLINICAL PERSPECTIVE

For the clinician, gender conflicts may first appear in a parent's struggle with dilemmas over their children's sense of being male or female (what is now called childhood gender nonconformity [CGN]). In the consultation room, it may appear when a mother says that her son's favorite game is dress-up. "Every chance he gets," says mother, "he wears my clothing or his sister's clothing and says he wants to be a girl. He puts on makeup and says that when he grows up he wants to be a woman. He plays with princess dolls and identifies with female roles." Girls also present with CGN, but focus their dysphoria on their wish to be a boy and have a penis. For some individuals, gender nonconformity (GN) may first appear in their adolescence or adulthood.[23] For the clinician, the first indication that there is a problem arises when a parent, spouse, or other authority figure comes into awareness and conflict with their child's, spouse's, or individual's cross-dressing.

Cross-Dressing

Cross-dressing (wearing the clothes of the opposite sex) is a phenomenon that has drawn much interest. Indeed, there is a considerable body of cultural, historical, literary, cinematographic, and autobiographical accounts of individuals who have cross-dressed. In a thought provoking book, Garber[24] pointed to both the interest and the cultural anxiety that underlies the phenomenon.

Cross-dressing may also be viewed as playful and representing a normal developmental stage in exploring one's sexuality and personhood. Cross-dressing can appear at all stages in the life cycle and be incorporated into creative self-expression or lead to neurotic anxiety, guilt, and shame. In the bedroom, cross-dressing can be used as part of normative arousal or stir up considerable

guilt, shame, and anxiety because of its forbidden aspects. If cross-dressing behavior becomes compulsive and the person is preoccupied with it and experiences intense frustration, anxiety, and dysphoria when they are thwarted from cross-dressing, the behavior can be viewed as symptomatic of an underlying distressing conflict regarding the self.[25] It is at this point in time that the clinician may be asked to evaluate an individual who is dysphoric over their cross-dressing or cross-gender behavior. Often the request for an evaluation comes from the partner who is dysphoric.

In some cases when an individual cannot achieve orgasm without wearing clothing of the opposite sex, the condition is called fetishism or transvestism and is viewed as a paraphilia (the new term for perversion).[26] Cross-dressing can serve many psychological motives and functions, and there is no one explanation for why a person cross-dresses. These motives may include the following: being impulsive as part of one's character; being defensive against underlying sexual/gender conflicts; anxiety allaying and exciting; reflecting impaired narcissism and the search for perfection in the self; employed to repair a damaged self-system; and serve as a bridge to self-fulfillment and wholeness.[27] Along with these psychological explorations of gender experience and conflicts, scientific studies have pointed to possible neurobiological underpinnings of cross-dressing as part of gender identification as related to evolutionary adaptation. Of course there are those who cross-dress for other reasons including: social events such as drag shows, part of one's gender rebellion, as part of female or male impersonation, secondary to participating in theater roles, and for disguise.[26]

In the 1980s, when Richard Green[7] was studying the phenomenon of cross-dressing and cross-gender identification in children, he wrote his seminal book on so-called sissies and tomboys. In that book he reported that 40 percent of gay males recalled cross-dressing and having GD as children. However, none of these boys went on to have serious gender identity problems or were committed to a career of cross-dressing. Eventually, all of them announced their homosexual orientation in adolescence. Green was aware of Ehrhardt and Meyer-Bahlburg's[12] scientific findings pointing to the relationship between the drug diethylstilbestrol that women took to preserve their pregnancy and its effect on female fetal brain development leading to tomboyism in girls (that is, finding a relationship between brain development and gender expression). Green's findings provoked a lot of thought about what the meaning of cross-dressing is for different groups of individuals. That is, cross-dressing and suspected GID might not be part of a mental illness in a subgroup of boys, but heralding later homosexuality in gay latency age boys. In this sense, one had to revisit the prescription of behavior therapy with these boys to make them stop cross-dressing.

Gender Nonconformity and Cross-Gender Identification

How do we understand cross-gender identification (CGI) or GN in children and adults? While current research stresses that the foundations of GN are biologically based, leading to specific brain activity for sexual arousal, gender identity, sexual orientation, and love relationships, the specific form an individual's gender identity takes is psychological. As neurobiological processes dovetail with parental rearing, the result is gender variance between and within each individual as the norm rather than the exception. When CGN presents in children, their gender-variant behavior (part of the normative spectrum of gender as expressed in children's development) needs to be recognized as normal.[29]

Clinicians and educators need to be active in recognizing and confronting genderphobia (a phenomenon akin to homophobia) in those social systems that promote ignorance and harm directed towards individuals with CGN. This is important for many reasons, not the least of which is the violence directed by some forms of our society against transgendered individuals (cf., the movie *Boys Don't Cry*). Gender conformity/nonconformity begins at the moment of birth when the announcement of, "It's a girl," or, "It's a boy" is made. Initially, the child's gender is assigned by the visual inspection of the genitals. For those children who have ambiguous genitalia, the sex and gender of the child may be difficult to assign. Many of these individuals are now designated as intersexed. During the first two years of the child's life, it is the parents or the maternal object who contain an image of the child's gender (that is, their projection of what they want their child's gender to be).

Most Western societies have identified a seemingly unambiguous developmental construct, gender identity, as coalescing in the individual around age two and leading to the child's first verbal announcement that, "I am a boy," or, "I am a girl." Although the child seems certain in his or her gender announcement, he or she may also go on to say, "When I grow up I will become a mother/father." For the two-year-old, everything is in flux because of their early stages of cognitive development and the lack of causation in their thinking. While gender conformity may appear to be the norm, the subjective life of the child suggests considerable internal conflict over one's sense of self. Individuals who are struggling with their gender identity are not a rare phenomenon.[30] The statistics of transgenderism from the United Kingdom, the United States, and India suggests that the occurrence/ratio of transgendered conditions is 1/300, 1/500, and 1/1000 births, respectively. Being transgendered is not a rare phenomenon but a variant of a typical gender identity outcome (a rare occurrence would occur 1/50,000). Moreover, we know that the occurrence/ratio of homosexuality in the United States is 5/100, hardly a rare phenomenon.

For those individuals who experience suffering and conflict around their sense of gender and self (men and women who experienced subjective distress over their gender, some of whom wish to change their sex and live in the opposite gender roles), the medical/psychological term GD was introduced to label their perceived distress. As a descriptive term, GD focused the dysphoria on the individual and not on the society that may be gender phobic.[31] Some of these children are labeled as GN, a label that has potentially serious consequences for the child.

Recently, the term transgender has been used as the generic construct to embrace all gender conforming individuals. The term encompassed those individuals who experienced themselves as blending aspects of femaleness and maleness into their gender identity. Bolin[32] viewed transgenderism as "a community term denoting kinship among those with gender-variant identities. It supplants the dichotomy of transsexual and transvestite with a concept of continuity" (p. 461 Bolin, using a deconstructivist model, argued that "transgenderism (has) perpetrated the disassembling of gender," as "the transgenderist harbors great potential either to deactivate gender or create in the future the possibility of 'supernumerary' genders as social categories no longer based on biology . . . the transgenderist has pushed the parameters of the gender paradigm even further by disputing the entire concept of consistency between sexual orientation and gender" (p. 485). As we enter the 21st century, postmodern gender theorists have challenged the view of absolutes in the social sciences, and stress the notion of ambiguity to describe the richness of human experience in terms of gender identification. In this sense, the meaning of gender nonconformity changes from an identity to a role concept.

Because gender variance better explains the diversity of gender roles and identities that exist in culture, the concept of transgenderism is a more appropriate term to describe individuals who defy the binary classification system of gender.

Nature versus Nurture: The Bruce/Brenda Controversy

While *nature* plays the pivotal role in the organization of gender identity, *nurture*, or parental influence, also plays a critical role in helping the child develop the appropriate level of emotional connectedness, affect regulation, and the quality of relationships so that he or she can have a meaningful, pleasurable, spiritual, and satisfying life in whatever is his or her gender adaptation. The dyadic bond between mother and child is critical during the early phase of bonding and the infant's security around its genital and gender self-development. While the child's gender self-experience develops along a continuum, both nature and nurture contribute to the ultimate shaping of one's sense of self and gender.

When gender theory is emphasized over empiricism, however, the results can be disastrous, as seen in the Bruce/Brenda Reimer case. The case played out in the scientific literature, but was given wide audience by Colapinto[33] in his book that summarized the debate. In the case involving identical twins, one twin had his penis burned off during a botched circumcision and was eventually raised as a girl based on John Money's influence.[34] Money tenaciously believed that a child's gender was determined by the sex rearing practices (nurture) of the parents and not by biology (nature). These ideas, which stood in the path of emerging scientific evidence, were enthusiastically supported by those who wanted to politically downplay the differences between gender and sex.

Called in as a consultant, Money argued that Bruce did not have a penis and should be raised as a girl, provided genital surgery to transform him to a female, and have the parents support her female role development. Because Bruce had an identical twin whose penis was not harmed, Money used the twin as control. Money's views on gender and sexuality seemed rooted in a naïve assumption that a boy without a penis was no boy at all, and that he would fare better socially as a girl. Money argued that if the parents dressed their boy child as a girl and raised him as a girl, he would become a girl. Diamond and Sigmundson[34] thought this was nonsense, as Professor Diamond's research findings revealed that the brain's circuitry was wired male or female. It was not the penis that made a boy male. It was his brain.

Money's follow-up article suggested that Brenda (originally born Bruce) was doing well, completely feminized, and was adjusting and living as a female. His findings were proof of his theory, and practitioners incorporated them into their theories of sexuality and gender. Diamond, however, tenaciously held onto his views and asked Money if he could interview the child and see for himself. Money refused.

The outcome of Money's crucial experiment was ultimately found to be specious, unscientific, and based on manipulation. Brenda hated being female and when she discovered her origins, she changed her sex/gender back to male. She always knew she was a male. Bruce married and seemed to be making a good adjustment. However, the trauma inflicted was too much, and Bruce committed suicide in 2004 (soon followed by her identical twin's suicide). The outcome was a tragedy.

No one should conclude from the outcome in the Bruce/Brenda Reimer case that parental rearing has no influence on childhood development. Nor should one read into these conclusions that gender identity simply follows an absolutely predictable binary structure, as there is diversity within the constructs of male and female gender identity. Parents can have an enormous effect on their children's social-emotional development, safety, development of self-regulation

and internal controls, moral and spiritual development, and can shape the direction in which gender expression may evolve. However, according to Diamond and Sigmnudson,[34] Roughgarden,[5] and others, after the second trimester of fetal development, parental rearing has no discernible effect on the child's brain structures for gender self-identity that are formed prenatally and can only be titrated, not completely altered, without disaster, as in the Bruce/Brenda case.

Clinical Manifestations of Gender: Identity and Role

The clinical concepts of gender role and identity were introduced by Money[22] and Stoller,[16] and elaborated on by clinical observations in naturalistic settings, developmental research, and the treatment of individuals who were experiencing extreme dysphoria over their gender role and identity. While most individuals take their gender role and identity for granted, there are many individuals for whom the consolidation of gender role and identity is only achieved with great difficulty, in many cases as the result of a tumultuous process.

In order to further one's understanding of the complexities of gender role, identity, arousal, and sexuality, consider the following vignette, one that I find increasingly common in clinical practice in which one's subjectivity and fantasy play a key role in gender development, and supports the richness of gender variance, not only as a biological construct, but as a psychological construct as well.

Ian subjectively experiences himself as a male and his sex partners and friends know him as a man (his biologic and social presentation of sex). In the past, he had sexual experiences with males, females and transsexuals. As an adult, he is a sexually anxious man who is narcissistic, and identifies as primarily heterosexual. In his current relationship, his girlfriend, Joan, left her passive, ineffectual, and addicted husband for Ian. She enjoys Ian's masculinity, his sexual energy as a man, and his large penis, which she worships. During sex, she gets fulfillment from his male sexuality. Ian, on the other hand, subjectively fantasizes himself as bigendered and having female sex organs. He knows that he is a male and loves his masculinity, but during sexual arousal he can only attain orgasm thinking of himself as a woman with female genitals. He is able to become erect through the physiological sensations associated with male sexuality. However, his orgasm is determined by another brain circuit related to his subjective sense of his gender variance and his arousal system.

Joan knows nothing of Ian's fantasy. His transgendered experiences take place in the privacy of his subjective fantasy. One might well ask, what is his gender identity? Ian would say masculine. What would his partner say if she knew his fantasy life? He is not gender dysphoric over his transgender fantasy because he enjoys the orgasm associated with his female fantasy. Moreover, his gender variance does not impact on his work or love relationships.

The subjective experience of gender identity conflicts are rarely shared with significant others. Some individuals, however, develop GD that begins in early childhood, and this is where our journey begins.[35] As evident in the above vignette, the experience of one's gender is a complicated concept in which subjectivity and fantasy provides important clues as to how gender identity is related to one's self-system.

The earliest report on childhood cross-gender preferences was of an 18-month-old boy.[36] Moreover, childhood transvestism has been recognized as a distinct clinical phenomenon. For young children, gender is determined not by the genital but by appearance. For the child, the world is knowable and everything fits into black and white categories until symbolization and abstract reasoning emerges. The child under the age of five identifies someone as a boy if he has short hair and wears pants. Likewise, a boy may be identified as a girl if he has long hair and wears pants.

Boys who are gender variant are often labeled as sissies if they show any deviation from culturally enforced norms of dress and behavior. Subsequent bullying and teasing may lead to impaired self-esteem, depression, and suicidal behavior. It is imperative that parents form a bulwark against these condoned behaviors.

The next major developmental landmark occurs around age three when the child discovers the anatomical differences between the sexes. This discovery has as much to do with gender as with narcissism. What we find is that the moment the child discovers the genitals of the opposite sex, he or she immediately tries to deny their existence. Prior to the recognition of anatomical sex differences, the child believes that all things are possible (the grandiose position), that the world is unlimited and the child can become anything it wishes including the opposite sex/gender. At the same time, the child also entertains the opposing belief that all things are identical and there are no differences. Once the child recognizes the difference of another human being, he or she realizes that there are some limits to his or her possibilities. This realization often leads to a normal depression that is time-limited. The depression has to do with the realistic understanding that the child's capabilities are not limitless.

The following vignettes reveal the childhood origins of CGN and GD as viewed through the lenses of actual children as they experience early childhood genital anxiety (genital dysphoria, the urge to harm or remove the penis) focused on their penis as a symbol of their male gender. These cases raise important issues about the young child's understanding of sex, gender, and the body.[37]

Elliot (age five), who had a strong desire to be a girl, said, "When my penis goes up I get mad and angry. I hate it when it goes up. I want to shoot it off with a gun. I want to get rid of it. I want to shoot myself and die." He once tried to cut

off his penis but was thwarted. His mother also intercepted his attempt to get his father's gun in order to shoot his penis.

Robert (age 4) believed that he had a vagina. He wanted to be a girl and told his mother that he wished he was born a girl. When his penis became erect he would pull back his testicles and bending his penis, would threaten to cut off his penis with a knife. Robert told his mother, "I want it to come off, it's ugly, I don't like it."

The wish to harm the penis is a primitive, concrete thought in these children and must be treated as soon as possible. While many children are self-destructive and harm their bodies, only gender dysphoric children try to harm their penis. None of the parents of these boys immediately contacted their pediatricians when their sons' expressed confusion, anxiety, and hatred towards their penis and maleness. This subgroup of children is at risk for genital mutilation without immediate psychological intervention.

Prior to their threats to genitally mutilate themselves, all of the boys were acting like girls, cross-dressing, and expressing a desire to be a girl. In some cases, the parents downplayed the urgency for a consultation because of the embarrassment and pain it stirred up in them. Indeed, the children's genital hatred and mutilation fantasies stirred up intense feelings of anxiety, fear, disgust, and terror in caregivers. Interventions that focused on latent gender conflicts in the family system led to the resolution of the genital dysphoria. However, as expected, the cross-dressing and cross-gender wishes of these children persisted, and the GD was experienced more acutely by their parents than the children.

While latency age girls with GD rarely exhibit genital dysphoria, their case presentations around the issues of GD are almost identical to the boys. These girls only want to wear unisex or boy's clothing. They refuse to wear dresses or anything frilly. They engage in rough and tumble play, and are labeled as tomboys. They believe they were born males with a female body. Like their male counterparts, cross-dressing for these girls is the norm. Girls with GD may want to have a penis. Many of them are creative in how they use various prosthetics to simulate a penis. As young children they do not, however, attempt to mutilate their female genitals, but fantasize and create a real or imagined phallus to serve as a bridge to resolve their GD. With the onset of adolescence and the development of their female genitals and bodies, some of these girls may bind their breasts and mutilate their vulva to allay their gender anxiety.

As the child enters adolescence, new stresses facilitate a reorganization of gender self-structures and lead to a new level of GD in boys and girls. With the entry into adolescence, the onset of the transsexual wishes and transgendered behavior may be accelerated and correlated with psychological stressors including, but not limited to: (a) a recent loss or change in a relationship which reactivates separation anxiety, (b) physical maturation of the body which threatens the gender self-system,

(c) stigmatized homosexuality, or (d) a flight from guilt-ridden masturbatory activity, leading to the belief that being the other sex would eliminate their conflicts. Children with gender identity conflicts have been identified as having comorbid separation anxiety. For these children, therapy must be intense, dynamically oriented, and linked with treatment of the parents.[38]

During adolescence, gender identity and role are subject to the vicissitudes of bodily changes, surging hormones, and powerful emotions that may be experienced as disorganizing in the transgendered young adolescent who is gender dysphoric and in the process of a reorganization of the adolescent self. For those males and females that experienced childhood GD, the onset of adolescence and the surfacing of powerful sexual feelings, in the context of the development and enlarging of their genitals, can be alarming as nature informs them that there is no turning back from their biological sex. Atypical depression among adolescents often signals an underlying disturbance in one's sense of maleness or femaleness.[39]

Because of legal issues and informed consent, there is virtually no possibility of a transgendered teen legally obtaining hormones and surgery until adulthood. Consequently, many gender dysphoric teenagers live in turmoil and chaos until young adulthood when they have the possibility of entering into more complex relationships and not be so isolated. The younger the child when GD is first identified, the more difficult is the transition to young adulthood. This difficulty relates to the lengthy period of time in which the child's impulsivity, mood destabilization, and problems relating to the social environment may intensify to catastrophic or suicidal proportions. Fortunately, with increasing awareness of the vulnerabilities of GLBT teens, support groups to help them manage their anxiety and alleviate their stress, thereby reducing their suicidal thoughts and plans, have been organized.

In an attempt to provide some narrative concerning this stage of development for the transgendered adolescent, consider the following case vignettes.

Earl, a 15-year-old African American male, lived with his schizophrenic mother and younger 12-year-old sister. He was referred for evaluation because of cross-dressing and truancy in school. He came to his appointments dressed in female clothes. Around age nine, he began to experience an increased sense of urgency to cross-dress and assume a female role after his father's and cousin's death.

Eva, a 16-year-old white female, had a history of moves, abandonment, child abuse, and neglect. At the age of seven she weighed 30 pounds and required surgery for a stomach tumor. Her father died soon after her surgery. As she entered preadolescence, she began cross-dressing as a male. At the time of the evaluation, she was afraid that her female lover would abandon her unless she obtained sex reassignment surgery and became a real man.

Persistent and enduring cross-dressing in these teens reinforced the opposite gender role for them. Their feelings of wholeness while cross-dressed also helped to solidify their new identities and shape the form of their transsexual/transgendered identification. During this period, a small percentage of teens who are diagnosed with schizophrenia also experience gender hallucinations and delusions about their genitals. They are not classified as having a GID in *DSM–IV*.[3]

Some teens with GD reacted with disgust and horror to unwanted bodily changes such as the dev elopment of breasts, testes, menses, and penis size at puberty. These teens may try to ward off their developing male or female bodies by dramatic acting-out rituals, including self-mutilating and suicidal behaviors. As latency aged children, they may have prayed each night that they would wake up transformed into the opposite sex and gender. However, the reality of mid-adolescence set in as each morning they awake and look at themselves in the mirror and feel the intensity of disgust and horror at their bodies.

Family systems and dynamics play a pivotal role in the child's evolving sense of security about his or her gender identity. As seen in many of the case vignettes, GD in the transgendered child is often amplified by the societal and familial response to their biology and rejection of their gender variant status. For these children, GD and subsequent GN behavior begins as a struggle in the family, necessitating family intervention. GD in the child may often be the result of genderphobia in the parents.

The act of masturbation in adolescence provides an important link to the development of the body image, the consolidation of the self and ego functions, and the development of reality testing. Masturbation fantasies provide the teen with inner access to his or her subjective experience. With the onset of puberty, the body becomes a continuous source of ambivalent, but hopefully pleasurable, genital sensations which may threaten to overwhelm the gender variant adolescent's ego. For the transgendered teen, the perception of the genitals as disgusting and shameful exist alongside the perception of his or her genitals as potential sources of intense pleasure. These experiences of pleasurable genital sensations are an ever-present reminder of one's anatomical sex, and can cause an emotional crisis for transgendered teens.

Myrna, an 18-year-old white female, recalled her conflict over masturbation. Although she felt compelled to respond to her genital excitation through masturbation, she despised her female sexual organs. She could only attain orgasm by fantasizing that she had a penis and was penetrating a female. Afterwards she felt guilty and empty.

Some gender dysphoric teens try to ignore their genital sensations. However, when their denial breaks down, intense feelings of guilt and shame may lead to genital mutilation.

As a result of lifelong gender confusion, many transgendered adults may have set aside their cross-gender wishes to marry or raise a family only to eventually find themselves inundated with urges to change their sex and live out their lives in a new role. These experiences were documented in a 2004 HBO movie, *Normal*, about a transgendered middle-aged, married man (with children) who was going through a sex change. Diedre McClosky's autobiography of undergoing a sex change at age 52 after marrying, fathering children, and working as a male also underscores the lifelong power of cross-gender wishes.[40]

The aging gender dysphoric individual has to deal with increased loneliness, isolation, and the realization that his or her narcissistic pursuit of perfection is bound to fail. The many biographies of transgendered individuals stand out as points of illumination for those individuals in search of happiness. The aging gender dysphoric individual also hopes that change is possible and that the self can be integrated and whole.

There are many gender variant individuals who never experience the surfacing of clinically distressing symptoms. These individuals received the support they need to consolidate a healthy self in their variant-gender adaptation and do not experience GD. They reflect what Roughgarden[5] and others have come to describe as gender variants of evolution's rainbow (diversity, gender, and sexuality in nature and people). While they may have to deal with society's transgenderphobia, they have had support from caretakers that gave a positive voice to their gender variance.

As can be seen in the case material presented, depending on the lens one uses, these individuals can be diagnosed as being mentally ill, according to *DSM–IV*,[3] or they can be viewed as normal and gender variant. My clinical experience suggests that a combination of the individuals confusion about one's self, combined with parental and societal rejection, often leads to comorbid psychiatric disorders of mood, substance abuse, alcoholism, and personality disorders that account for their suspected mental illness that is incorrectly associated with their transgendered status and gender variant behavior.

Future Directions for Gender Identity

Gender identity formation is a complex and dynamic process that changes over one's lifetime. Evident by age two and a half, one's gender identity changes over the life cycle depending on many factors, including but not limited to the following: the individual's personality; level of intelligence and executive functioning; central nervous system based brain circuitry for sex; arousal and

gender; level of childhood anxiety and conflict over one's gender identity; experience of trauma; having adult links to paraphilias that enhance gender confusion; history of drug and alcohol abuse and dependency (especially the type of drug used, with amphetamines and cocaine being identified as sexual/gender stimulants and activators); and the cultural and familial values, support systems, and self-object relationships that the individual interacts with providing access to, or inhibition from, creative gender self-expression.

In the 1960s, Robert Stoller, a prominent psychoanalyst and gender researcher, offered an explanation of the etiology of transsexualism based on the binary model. Abandoning the conflict model of psychoanalysis, he accepted Money's imprinting, nonconflictual model to explain transsexualism.[41] He postulated that the child's so-called blissful symbiosis with the mother was responsible for the imprinting of a cross-gender identity in males. Under the sway of Stoller's influence, his own psychoanalytical colleagues abandoned their critical thinking and put aside the conflict model of personality that is at the heart of psychoanalysis. While Stoller's views are now discredited by developmental psychologists and neuroscientists, the influence he swayed over his colleagues revealed how implausible hypotheses may be appealing no matter how implausible.

Newer findings from fMRI studies suggest that brain circuitry and specific brain nuclei may be responsible for organization and arousal, gender identity, sexual orientation, and love relationships. Brain imaging studies help us to understand the underpinnings of core brain structures on the behavioral expression of gender. However, the specific ways in which gender identity is expressed in each individual appears related to the complex and unique organization of the person, parental, and social influences.

Pediatricians and gender surgeons need to have their practices informed by the more current research findings on gender. The brain is the biggest and most important sex organ. Secondary sexual characteristics may change, but one's basic sense of self is biologically rooted in the development of the brain. In the case of Brenda, she always knew something was wrong and that she was a boy. In the cases of the Dominican Republic females who changed into males at puberty, they knew well in advance that they were not females. Their brains informed them so long before the actual changes occurred. For those individuals who feel trapped in the wrong body, perhaps their brains are telling them something important that all of us have to listen to.

On the basis of misleading and inaccurate findings, about 100 children in the United States and 1,000 children worldwide are provided sex reassignment surgery before age two. This practice has to stop. Recently, children previously identified as hermaphrodites and now labeled intersex as adults have been very vocal about why genital surgery should not have been done on them as children.

They argue correctly that the biological basis of maleness or femaleness is rooted in deep brain structures and that any surgical interventions should have been delayed until adulthood when they could give consent.

You cannot make a boy female by giving him female genitals or a girl male by giving her male genitals. Gender is a brain construct. Intersex and transgendered children and adults need to be listened to and provided the acceptance and dignity they deserve. It is up to society to accept these findings into the mainstream of psychology, and to petition for changes both in medical and social practices about how genderphobia and scientific ignorance have only prolonged unnecessary suffering in transgendered individuals.

The medical diagnosis of GID reflects a view of gender identity as binary and is under attack from the scientific and GLBT community. As the American Psychiatric Association begins its work towards the publication of *DSM–V*, the question of whether GID will be listed as a disorder is being debated. The main objections focus on (1) the fact that gender is now defined as a continuum concept and not a disorder; (2) that the dysphoria associated with GID is probably related to the individuals assimilation of society's genderphobia of the transgendered individual; (3) children who present with atypical gender self-expression may be prehomosexual or gender variant but do not have a disorder; and (4) scientific evidence suggests that gender variance is the norm.

The main support for GID comes from several sources: (1) individuals who want transsexual surgery and want a diagnosis in order to have their insurance pay for it; (2) to assure a medical diagnosis in order to pay for psychotherapy treatment, and (3) as long as society remains homophobic and genderphobic, children will suffer and be in need of help.

The elimination of GID as a distinct *DSM* diagnosis would begin to address society's transgenderphobia and the violence directed against some GLBT youth and raise important social policy issues about providing prospective medical payments for those individuals who require medical treatment for their distress and suffering without labeling gender variance as an illness. In the future, while more sophisticated brain research will provide additional scientific evidence linking gender and brain structures, newer gender variants will arise and challenge our present assumption about the etiology of gender. For the present, individuals with GD will continue to present clinically, and their issues will need to be addressed sensitively, ethically, and compassionately. There is much to learn about the science of sex and gender and the social-emotional distress caused by gender phobia. Hopefully, public policy will address the inequities and discrimination that transgendered individuals experience, and as a result of the scientific findings, help to dispel the ignorance and fear directed towards them.

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Sexual Orientation and Mental Health: What the Behavioral Sciences Know about Sexual Orientation and Why It Matters

John C. Gonsiorek

Recent decades have seen a seemingly endless array of public policy controversy regarding sexual orientation, almost all of it focused on same-sex attraction, or homosexuality. Civil rights for homosexual citizens, gays in the military, homosexuality and child abuse, the fitness of gay men and lesbian women to parent, and most recently, same-sex marriage, have been debated extensively, although often in ways that shed more heat than light.

One might conclude from these contentious and unresolved disagreements that the behavioral sciences are as divided and befuddled as the rest of the public on these issues. In fact, however, there is generally rather strong consensus about these issues in the behavioral sciences, and typically in a manner that would be construed, at least within the terms of these polarized debates, as "progay"; although most behavioral scientists would likely see their positions as proscience, in that they are following the available data. These data, and the perspectives of the behavioral sciences, are introduced in this paper across a few basic topics, followed by concluding suggestions on the meanings and implications of these debates.

Primary among these topics is perhaps the most basic one: how sexual orientations are defined and measured. Surprisingly, for phenomena that generate so many dogged opinions, sexual orientations are remarkably elusive to define and measure. As will soon be seen, the objects of such intense disagreement come close to being ephemeral.

THE DEFINITION AND MEASUREMENT OF SEXUAL ORIENTATIONS

There are a number of good sources available for readers interested in a more detailed explication of the challenges of defining and measuring sexual orientation.[1,2] One of the first challenges involves differentiating various behaviors and attributes that have been confused with sexual orientation. Shively and De Cecco[3] early on developed a useful distinction in dividing sexual identity into four parts; their model has remained robust over the years. The first is *biological sex*; the genetic material encoded in chromosomes. The next is *gender identity*; the psychological sense of being male or female. *Social sex role* is adherence to the culturally created behaviors and attitudes that are deemed appropriate for males or females. Finally, *sexual orientation* is erotic and/or affectional disposition to the same and/or opposite sex. The first three bear no necessary relationship to sexual orientation in any given individual, although each has been confused with sexual orientation.

The work of Kinsey and his associates ushered in the modern era of scientific measurement of sexual behavior.[4,5] These were based on in-depth interviews with approximately 17,000 subjects covering a wide range of human sexual activities. Kinsey's data indicated an amount of homosexual activity greater than previously acknowledged in U.S. society. Kinsey's data cannot be used uncritically. They describe a particular sample population at a particular time, and the Kinsey group used sampling techniques and methodologies that were innovative in mid-20th century, but flawed by current standards.

Kinsey's group conceptualized sexual behavior as falling on a seven-point continuum from exclusively heterosexual (score of zero) to exclusively homosexual (score of six). A person in the middle of the scale (score of three) would be more or less evenly bisexual, for example. Kinsey's work was revolutionary at the time because it suggested more same-sex behavior than was previously anticipated, and also more clearly developed the notion of bisexuality. Kinsey's notion of a heterosexual-homosexual continuum challenged the dichotomous, either-or view of sexual orientation.

There may be significant problems, however, with a single continuous scale. Shively and De Cecco[3] expanded the Kinseyan continuum concept, adapting another researcher's revisions of the concepts of masculinity and femininity. Shively and De Cecco suggested that a single continuous scale like Kinsey's might be insufficient to explain sexual behavior and orientation. They suggested that sexual orientation can be better conceptualized with two continuous scales. Separate ratings for homosexual and heterosexual behavior can then be made, and the ratings then graphed on "Homosexuality" and "Heterosexuality" axes

that are perpendicular to each other. Their proposed scheme would eliminate a restrictive implication of the Kinsey scale, namely that the bisexual positions can appear to be watered down mixtures of the two dichotomized components and that one form of sexual expression is at the expense of the other. For example, in their scheme it would be possible to differentiate an individual who has a high degree of homosexual interests and concurrently high degree of heterosexual interest from an individual who has a minimal degree of homosexual interest and simultaneously a minimal degree of heterosexual interests; clearly, these are very different people. Such a differentiation is not possible with the simple Kinsey scale, which would code both examples as a three, because the proportion of same versus opposite sex interests and behaviors are equal, even though the intensities vary dramatically.

There are other considerations in the definition of homosexuality: what variables are counted. The original Kinsey continuum readings used composite scores of sexual behaviors and fantasy (attraction) to arrive at the ratings. It may be the case that a third aspect is also important; affectional, as opposed to sexual, orientation. This aspect refers to the sex with whom an individual prefers to relate on an affectional, intimate, or friendship-based level, as opposed to sexual behavior or sexual fantasy level. As these three aspects may not be congruent, it may be useful to rate individuals separately on the three aspects of sexual behavior, sexual fantasy, and affectional orientation, which Klein, Sepekoff, and Wolf[6] attempt with their Sexual Orientation Grid. Others have examined the eroticization of friendship as opposed to body shape in some detail, and suggested this as an important component.

But here, a significant problem emerges. Suppose one uses separate two-axis grids to describe sexual orientation via behavior, fantasy, and affectional variables. What do you name an individual who is not congruent across these variables? The dilemma is that while it is clear that a simple Kinsey continuum fails to capture the complexities of sexual orientation, those models that do capture the complexity rapidly lose utility as the complexity becomes unmanageable, both in a research sense, and simply in terms of common sense understanding.

In addition, psychological processes may intervene to restrict the accuracy of this information. Many individuals deny their same-sex feelings, and for other individuals, self-identity and behavior are not necessarily congruent. For example, an individual may call herself lesbian and by that mean any complex arrangement of sexual, affectional, or political variables at a point in time. Gay men and lesbians may differ in the bases for self-definition, perhaps related to gender differences. Golden[7] describes how many lesbian women, and some heterosexual women as well, perceive choice as an important element in their

sexual orientations; Baumeister[8] also suggests significant gender differences. Lesbians appear to perceive affectional orientation and political perspectives as central to self-definition, while gay males appear to view sexual behavior and sexual fantasy as central. Since the organized lesbian and gay communities are nascent, the bases for self-definition can change over time as these communities evolve. How a given individual defines these variables, and more importantly, whether this point in time predicts past or future behavior, is difficult to ascertain. It can safely be assumed that there is no necessary relationship between a person's sexual behavior and their self-identity unless both are individually assessed.

Perhaps the most dramatic limitation of current conceptualizations is change over time. There is essentially no research on the longitudinal stability of sexual orientation over the adult life span. In other words, even if one could satisfactorily measure the complex components of sexual orientation as differentiated from other aspects of sexual identity at one point in time, it is still an unanswered question whether this measure will predict future behavior or orientation. Certainly, it is not a good predictor of past behavior and self-identity, given the developmental process common to most gay men and lesbians (i.e., denial of homosexual interests and heterosexual experimentation prior to the coming out process).

A major problem facing such studies is the risk involved in self-disclosure, especially where the studies fail to ensure complete anonymity. In many places, homosexuals remain potential and even likely targets for embarrassment and harassment. Some homosexuals, particularly those who are successful and established professionally, may be unwilling to take the risks involved in being subjects of research. This may be informative about those homosexuals who are willing to be researched. For example, Burdick and Stewart,[9] on the basis of their research study, theorized that there is a tendency for homosexuals who readily volunteer for psychological research to be less well-adjusted than those who do not. While this conclusion requires more research, it does raise questions about whether homosexual volunteers for research are representative samples.

Most studies determine homosexual orientation by asking the individual, but a few studies use physiological measures to determine sexual orientation. The work of Kurt Freund is perhaps the most rigorous work in this area.[10,11] Freund invented a device called a plethysmyograph that fits over the penis and directly measures its blood volume; an analagous device can measure female genital blood flow. Sexual orientation—or, in Freund's terminology, "erotic orientation to body shape"—is observed by recording genital blood volume responses when the subject is shown photographs of naked people of various ages, appearances, and sexes.

Numerous studies have demonstrated the fundamental reliability and validity of this technique. Not surprisingly, plethysmyography does not work well with involuntary subjects, as anyone wishing to fool the procedure can simply fantasize something other than the visual stimuli presented, without external indications this is occurring. It is therefore impractical to use it to determine the prevalence of sexual orientations in the population at large. Nor can we assume *a priori* that erotic orientation to body shape correlates in any simple way with self-identification as homosexual or bisexual. The technique is scientifically useful, however, in demonstrating that sexual orientation (or erotic orientation) is not merely sexual behavior, nor is it just a behavioral choice. Freund suggests that there are responses that are embedded in the nervous system that are related, however imperfectly, to what people term sexual or erotic orientation. Those responses are distinct from actual sexual behavior.

By far the most common measurement has been verbal self-report. There are significant limitations to this method. First, individuals must accurately appraise their own degree of same-sex interests. As described by Gonsiorek and Rudolph,[12] individuals prior to the coming out process (and at times during and after this process), often distort their degree of same-sex interests as a way to defend against this realization. Therefore, *when* one asks an individual (over the course of adolescent and adult development) about same-sex interests is crucial. This issue is particularly acute in measuring sexual orientation in adolescents, whose sexual orientation may not yet be manifest or may be unclear to them, or whose level of (mis)information may result in their verbal report not meaning the same thing as the researcher understands.

Further, given the social condemnation of homosexuality, there are other constraints on verbal self-report. Research subjects who have reasons to doubt the confidentiality or anonymity of the data or who are simply frightened of negative repercussions, regardless of guarantees of safety, are likely to under-report same-sex orientation. For example, as one researcher noted in a cross-cultural sample of men from Ireland, Finland, Australia, and Sweden, individuals expecting the most negative reaction from others to their homosexuality are less likely to report homosexual activity in themselves. It is likely that self-report measures represent an underestimate, to an unknown degree, of homosexual orientation. There are some suggestions that those who refuse to respond to questions about homosexual behavior may be disproportionately likely to have substantial homosexual experience.

Given such significant measurement problems, one could conclude there is serious doubt whether sexual orientation is a valid concept at all. In fact, one theory, *social constructionism,* suggests that there is nothing "real" about sexual orientation except a society's construction of it. *Essentialism* suggests that

homosexual desire, identity, and persons exist as real in some form, in different cultures and historical eras. Not surprisingly, social constructionists generally reject the possibility of biological factors in sexual orientation, while essentialists can accept (but do not necessarily require) biological factors. Regardless of these significant methodological concerns, most present-day North Americans tend to label themselves as homosexual, heterosexual, or bisexual despite the fact that these labels do not capture the full range of complexity of sexual orientation and sexual identity. But it is important to acknowledge that despite the acceptability of such terms in common parlance, their scientific meaning is quite unclear.

It would not be at all surprising if future research suggests that with our current tripartite division of sexual orientation into homosexual, heterosexual, and bisexual, we are cutting the pie in the wrong way, and that there are homosexualities, heterosexualities, and bisexualities as different within class as between classes—or even that other variables are better candidates for constituting a class. What might the sexual orientations look like if ordered primarily by patterns of affiliation, or by particular chromosomal patterns, or by propensity to engage in particular sexual behavior? Or that the bases for sexual orientation differ in women and men? Such possible radical restructurings of the way we conceptualize the sexual orientations are by no means a foregone conclusion, but neither is it a foregone conclusion that much of our current conceptualizations will survive future research findings and theoretical development.

THE RELATIONSHIPS BETWEEN SEXUAL ORIENTATION AND MENTAL HEALTH

Homosexuality first evolved into a medical "illness" in the late 19th or early 20th century, depending on the country. In 1973, the American Psychiatric Association removed homosexuality as a diagnosis of illness, replacing it with ego-dystonic homosexuality, a vague and problematic concept that attempted to label dissatisfaction with same-sex orientation as an illness.[13] In early 1975, the governing body of the American Psychological Association voted to support the 1973 action of the American Psychiatric Association. Ego-dystonic homosexuality was itself removed in 1986, probably because it created more confusion than illumination.

In 1957, University of California, Los Angeles, psychologist Evelyn Hooker published research which challenged the illness model when she reported that a panel of psychological testing experts was unable to differentiate samples of homosexual from heterosexual men using a battery of tests measuring mental health problems. At the time, this finding was surprising and inaugurated two

and a half decades of experiments using psychological testing in an attempt to differentiate homosexual from heterosexual samples. This literature has been summarized by a number of authors,[14,15] who can be consulted for greater detail. The findings from this literature overwhelmingly supported a rejection of the illness model of homosexuality. In fact, it is fair to say these results are sufficiently consistent and compelling, and that current theories which purport a scientific basis for an illness model of homosexuality represent egregious distortions of these data.

This literature was the empirical basis for the depathologizing of homosexuality in the early 1970s. Most of the studies involved were unable to differentiate with any consistency homosexual from heterosexual populations. It is important to recognize, however, that this level of "proof" is actually unnecessary to depathologize homosexuality.

The illness model of homosexuality maintains that the existence of persistent homosexual feelings and/or behavior in an individual is in and of itself absolutely predictive of psychological disturbance. Findings supportive of *any* group of homosexual individuals who are not psychologically disturbed refute this model. One could even push the argument, then, that the comparative rates of psychological disturbance in homosexual and heterosexual populations are irrelevant to whether homosexuality is an illness. The only relevant issue is whether *any* non-pathological homosexual individuals exist. The psychological test literature suggests that many non-pathological homosexual individuals exist; and that in addition, homosexual and heterosexual individuals cannot be reliably differentiated, much less one group ascribed psychopathology.

Further, there are some reasons, such as facing increased levels of external stress, to believe that certain measures of disturbance may be higher in some homosexual populations as well as in other disparaged groups. This also can be congruent with an assumption that homosexuality itself is not indicative of psychological disturbance. If homosexuals as a group are subject to high levels of external stress, then a proper comparison group may not be heterosexuals in general, but heterosexuals with roughly equivalent external stress. As noted below, there are some measures of psychological difficulties in which there are clear indications that homosexual and heterosexual populations differ.

For example, higher rates of alcoholism and substance abuse, suicide attempts, depression, and other problems have been both suggested, but also disputed, as higher in lesbian and gay samples.[16] While the actual prevalence remains unclear, it would be unsurprising and expected if some of this were so, since it is a truism that economic, social, and/or political discrimination, among its other effects, results in enhanced risk of medical and mental health problems, regardless of the targeted group.

A final line of research findings are intriguing in the context of mental heath and sexual orientation: what characterizes those homosexual individuals who are well-adjusted psychologically? The factors that have emerged include features such as: (1) homosexual individuals who are well-adjusted rejected the idea that homosexuality is an illness, had close and supportive associations with other homosexuals, and were not interested in changing their homosexuality; (2) positive commitment to homosexuality was related to good psychological adjustment and the existence of significant others who support that identity; (3) membership in homosexual groups had positive psychological effects or was predictive of self-esteem; (4) among rural gay men and lesbians, having a supportive community is psychologically beneficial; and similar findings.[17]

In summary, when examining what is known about mental health problems of homosexual populations, the findings are somewhat complex. There is no indication that homosexuality in and of itself is predictive of mental illness. There are suggestions, but no certainty, that in some subgroups of gay and lesbian individuals there may be increased health and mental health risk, consistent with comparable risks in other disparaged groups. It is also clear that positive attitudes towards one's homosexuality and implementing those attitudes into behavioral form, such as maintaining relationships with other lesbian and gay individuals and becoming socially and politically active in lesbian and gay communities, tend to increase psychological adjustment in gay and lesbian populations.

It is important to comment on a particular distortion that has developed regarding the depathologizing of homosexuality; namely, that it occurred primarily due to political pressure.[18] There is little question that the this change was accompanied by unpleasant infighting within the American Psychiatric Association at the time, but the basis for the change was the overwhelming lack of empirical support for the illness model. This declassification must also be situated in the larger context of the sea-change that occurred in the diagnostic nomenclature as the theoretically driven and psychodynamically oriented *Diagnostic and Statistical Manual of Mental Disorders*, Second Edition *(DSM−II)*[13] gave way to the empirically driven and biologically oriented *Diagnostic and Statistical Manual of Mental Disorders*, Third Edition *(DSM−III)*.[19] Simply stated, the declassification of homosexuality was an early and relatively minor skirmish between these opposing forces in psychiatry in the run up to the publication of *DSM−III* in 1980.

On a more basic level, it is absurd to maintain that a rag-tag band of gay liberationists without any established power base could, in 1973, cause a capitulation of the American Psychiatric Association, which was then successfully resisting calls for change from much more powerful social and economic forces.

Rather, it was useful politically for empirically driven biological psychiatry to allow the humiliation of the old psychoanalytic guard with this issue in order to weaken them for more important battles to come. The old guard could be so easily humiliated on this issue because the data were so clear.

In summary, despite the tactic, by those who believe homosexuality must be an illness because they find it unacceptable, of coyly fretting over supposedly unresolved issues about the relationship between mental health and sexual orientation, there is overwhelming consensus in the mental health professions that same-sex orientations are not indicative of mental illness. There is much work that remains in this area, but it is in the area of how to identify and assist those subgroups of sexual minorities who are at enhanced risk for psychological and medical problems. In other words, the primary issue is how to reduce vulnerability and enhance resiliency. This is the public health challenge for all of humanity, and it is typically especially pointed for those individuals who are members of disparaged and/or disadvantaged groups.

CURRENT CONCEPTUALIZATIONS OF THE "CAUSES" OF SEXUAL ORIENTATIONS

One might easily imagine after the discussion about definitions and measurement above, that approaching the nature and causes of sexual orientations would be enormously complicated. Indeed it is, and an adequate coverage of this topic would require a volume of its own. Some words are in order, however.

Simply stated, there is currently no consensus about the causes of sexual orientations. The choice of these last words is careful: any good theory of sexual orientations must work across a range of same-sex, opposite-sex, and both same and opposite sex eroticism, and be able to handle the kinds of variation within each category suggested in the earlier section above on definition and measurement. It must also be able to embrace the possibility that there are multiple varieties of homosexuality, heterosexuality, and bisexuality as different within category as these categories are from each other. Many have suggested that the biggest challenges of any theory involve: retaining explanatory power across genders, adequately explaining the bisexualities, and providing a reasonable framework to understand the considerable cross-cultural variations observed. This is a VERY tall order.

Recent decades have not seen much in the way of primarily environmentally based comprehensive theories of the sexual orientations, perhaps because earlier illness-based psychodynamic theories were such a disappointment. There have been impassioned antibiological arguments made, especially from feminist and social constructivist sources. These have been useful in prodding biologically

oriented scholars to adopt more nuanced, primarily interactionist models. This has had the ironic effect of improving the quality of biological models, especially as these critiques have offered little in the way of alternatives to the biological approaches they critique.

While biological models (or rather interactionist/biological models, since almost all serious biological models are now interactionist) have provided some tantalizing suggestions that may address parts of the puzzle, no comprehensive picture has emerged here either. This may well be a credit to appropriate caution on the part of many biological scholars, as well as the apparently daunting complexity of the sexual orientations.[20–23] Another intriguing development has been the deeper appreciation of the extent and complexity of same-sex behavior among other species[24]; but again, no comprehensive certainty about the nature and causes of sexual orientations in our species has emerged.

This lack of certainty should not be taken to mean that fruitful ideas are not being put forward. In fact, the current dilemma seems to have inspired a good deal of creative thinking from a variety of vantage points. However, little of this has filtered down to public policy debates, which seem to move little beyond sloganeering that people "choose to be gay" or are "born that way." It can safely be said that the first of these is simply without scientific foundation or even logic, and the second is so simplistic as to bear scant resemblance to any serious model.

ATTEMPTS AT "CONVERSION" AND "REPARATION" OF HOMOSEXUALITY

Prior to the depathologizing of homosexuality, there were a number of theorists, primarily psychoanalytic, who described in detail the alleged psychopathology of lesbian and gay individuals. Most of their work was based on psychoanalytic speculations about populations of troubled homosexuals who appeared for psychotherapy. Some of these theorists purported to conduct research which supported their views, although in fact it represents a parody of research.

For example, the Bieber et al research[25] is really a case study in researcher bias. They compared male homosexual and heterosexual patients in psychoanalysis. The same group of psychoanalysts developed a theory about homosexuality; developed a questionnaire to test their theory; designed the research study; served as analysts for the patient-subjects; served as raters in the research project on their own patients; and interpreted results. It is not surprising that they concluded that their theory had been verified. It is difficult to build more potential for researcher bias into experimental procedures than that which is evident in the Bieber group.

Unlike behavioral therapists who by and large dropped their attempts to "cure" homosexuality after homosexuality was depathologized, some psychoanalysts have continued expounding an illness model of homosexuality. Concurrent with these attempts, however, has been the development of fairly elaborate psychoanalytic models that do not view homosexuality as an illness, but rather as a normal variant in the human condition, and proceed to describe how psychoanalytic methods can be useful in understanding and assisting gay, lesbian, and bisexual individuals who may have difficulties; essentially, gay/lesbian affirmative psychoanalytic perspectives,[26,27] which gradually seem to be becoming mainstream within psychoanalysis.

Perhaps the most vocal of current illness theorists tend to be fundamentalist Christian therapists. These are church affiliated individuals who purport to cure homosexuality through a combination of religious exhortation, often intermingled with fragments of 12-step self-help programs.

There are a number of common features of these religiously oriented repathologizing attempts. First, they focus on changing sexual orientation, and do so almost exclusively with males. These efforts generally assert, based on no discernable data, that its members have been cured of homosexuality. On closer examination, many of them acknowledge that homosexual desire remains, but the individuals have "chosen" to lead a moral, heterosexual life. In effect, what they are occasionally capable of doing is utilizing group pressure and brainwashing to coerce gay males into not acting upon same-sex feelings. It is a comment on the pervasive sexism of these groups that lesbians are of little interest and rarely attract their so-called therapeutic efforts. It appears only males are important enough to warrant such interventions.

Another feature of this new fundamentalist repathologizing of homosexuality is the creation of bogus scientific institutions and foundations. They often have substantial funding and are usually headed by obscure individuals who are self-proclaimed authorities in the field. They frequently have well-orchestrated media contacts, usually in the wake of a legislative or court controversy, and often disappear and reemerge as needed. The substantial funding, nationwide coordination, and well-executed access to media suggest that many of these foundations, if not most, are part of a coordinated effort.

A recent hybrid is the appearance of professional-appearing attempts to "cure" homosexuality, usually couched in a 1950s style psychoanalytic approach. Case examples, but no scientific data, "prove" the authors' points. Most of these, on closer examination, bear clear indications of their religious affiliation.[28] A common feature of this pseudoscientific, covertly religiously oriented approach is to ignore the scientific information discussed above and to repose questions regarding psychopathology and homosexuality which have been decisively answered,

under the guise of scientific inquiry and curiosity about these "unanswered" questions. Attempts are made to create false confusion regarding scientific information about homosexuality. No new scientifically verifiable evidence is produced. Their assiduous distortions of current research, reliance on case studies, and use of obsolete literature and ways of understanding sexual orientation effectively make the point that the depathologizing of homosexuality is robust.

Despite refutations of this literature, and its becoming even more ethically and professionally tenuous on the publication of guidelines for effective clinical work with non-heterosexual populations,[29] conservatively religious conversion or reparation therapists have become increasingly aggressive, both in attempting to gain legitimacy in the field, and in advocating a discriminatory political agenda.

A number of authors have offered thoughtful analyses of such so-called therapy.[30–32] The core dilemma with such therapies is that a non-heterosexual orientation is not a mental illness (despite repeated attempts by conversion therapists to reframe homosexuality as mental illness in need of change). Attempts to convert homosexuality to heterosexuality are of questionable efficacy, and are ethically compromised and heavily reliant on misinformation and disinformation. They also pose serious problems of informed consent, and a moderately high likelihood of adverse sequellae. Yet, conservatively religious clients sometimes request such therapy, some conservative Christian institutions actively foster social conditions to maximize distress for such clients about their sexual orientations, and these institutions simultaneously promote conversion therapy as the solution to this distress.

Conservatively religious Christians, while giving passing acknowledgement to Christian traditions other than their own, typically proceed as if the only alternative to their theology is loss of faith. This is an exaggerated dichotomy; perhaps a specific version of faith may be lost, but the loss is not one of Christian faith. Within Christian traditions in general, and even within conservative Christian traditions, there is considerable difference of opinion, even turmoil, regarding sexual orientation. Simply stated, any viewpoints other than strict adherence to orthodoxy are viewed as a crisis of faith and allegiance within Christian conservative orthodox thinking. This crisis is predominantly created by religious orthodoxy, and is part of a larger effort to constrain and suppress theological diversity within these traditions. Religiously conservative Christian hierarchies do not speak for Christianity or even conservative Christianity; the voices of Christianity are multiple and varied.

On the other hand, conflicts between religious belief and sexual orientation can be truly distressing. In fact, this has been a commonly recognized experience in current sexual minority communities, who have been seeking resolution of spiritual concerns since there were such modern communities.

Religious organizations have consistently been among the largest within sexual minority communities, usually surpassing political action organizations. Virtually every denomination, including religiously conservative denominations, has an equivalent organization in the lesbian/gay community whose purpose is to reconcile that particular faith tradition with a positive sense of lesbian/gay identity. These organizations vary in the degree to which the specific denomination welcomes them, but have been durable despite this.

Sexual minority communities have been working for decades to integrate spiritual life and sexuality, while conservative religious traditions have simply condemned this search because it does not conform to notions of orthodoxy and threatens to elicit other aspects of theological heterodoxy within conservative Christian communities. Conservative Christian hierarchies reject as unacceptable any view that diverges from its orthodoxy. Sexual minority communities have aspired to craft solutions that integrate both sexuality and religious tradition. These aspirations are ignored and disparaged by religious Conservatives, who disapprove of them on theological grounds.

Such disapproval can and does create psychological distress for those caught in between, particularly when accompanied by militant social and political activism to assure second-class status for sexual minorities, and planful measures to create misery and distress for those deemed second-class. The effects are psychological, but the problem is one of theology run amok, attempting to impose theocracy.

Recently, integrative solutions to this conflict have emerged. These generally share a view that all aspects of a client's self or identity are worthy of respect, and that the therapeutic goal is to assist the client in finding a solution, when different components clash, in which all will find some place at the table. These integrative solutions offer no decisive resolution, but rather a process of persevering in the attempt to craft a solution by valuing both sexuality and spirituality, addressing psychological conflict and distortion when they appear to be interfering, and trying to find a middle path in which no component of the individual is violated or disparaged. In essence, these approaches assert that for clients who are both same-sex attracted and conservatively religious, effective therapy cannot have a sole focus on either, but must work to integrate both if it is to be effective and beneficial in its effects.

This is a perspective that reaches beyond this particular controversy. A major work on cultural diversity suggests a comparable middle path in which the mental health professional should neither invalidate a client's cultural beliefs, nor support indoctrination into cultural beliefs. Implicit in the approach being suggested here is that mental health professionals remain in role as professionals in handling such issues, providing information, helping clients integrate various issues, reducing the impact of personal pathologies and liabilities that

might impair resolution, serving as a source of neutral but concerned feedback, and similar therapeutic functions. This role, however, does not include posing as spiritual guides; operating as theological, cultural, political, or sexual enforcers; or rescuing clients from grappling with their own existential, spiritual, and philosophical dilemmas when the various components of who they are in their human fullness do not easily coexist.

It is difficult to think of another situation where such a clash allegedly exists between the principle of respecting diversity and other aspects of ethical conduct and professional practice responsibilities. I suggest that this dilemma so resists resolution because it is being misstated. The problem can be more clearly addressed if the underlying rationale of conversion therapies is fully articulated. At their core, conversion therapy seeks to legitimize the use of mental health techniques and behavioral science to enforce compliance with religious orthodoxy. The dilemma resists solution because it cannot be solved. Either the mental health professions are co-opted into abdicating their ethical principles, professional practice standards, and scientific base, or they soundly reject the enforcement of religious orthodoxy as a legitimate goal of mental health practice. Conversion therapists are asking the mental health professions to endorse and sanction the theologically based creation of psychological distress in sexual minority individuals, and this distress is then rationalized as an acceptable justification for conversion therapy.

HOMOSEXUALITY AND FITNESS: MILITARY AND PARENTAL

The volume by Herek, Jobe, and Carney[33] provides a strong platform for understanding the issues involved in gay and lesbian service personnel in the military. To briefly summarize their findings, there is no sound basis for excluding gay and lesbian personnel from the military. Such personnel have been successfully integrated into armed forces around the world, including many key U.S. allies, and the challenges of integrating gay and lesbian personnel are akin to those of integrating African American personnel into the U.S. military, a task which the military actually tackled successfully prior to the success of the civil rights movement in the broader society.

Ironically, given the military's history of denying that gay and lesbian people exist in military service and the attempted exclusion of gay and lesbian people from their ranks, some of the most interesting research with large sample sizes comes from the United States Department of Defense. Two internal studies were leaked early in the debates about the suitability of gay, lesbian, and bisexual citizens in the U.S. military. McDaniel[32] posed the question whether homosexuals would

be suitable for national security clearances. He collected information about educational experiences, alcohol and drug use, criminal activities, and other factors on a self-report inventory, and then compared individuals who were discharged from the armed services for homosexuality versus other groups. McDaniel found that homosexuals had better preservice adjustment than heterosexuals in areas related to school behavior, that homosexuals displayed greater levels of cognitive ability than heterosexuals, and that homosexuals had greater problems with alcohol and drug abuse than heterosexuals. With the latter exception, homosexuals resembled those who had successfully adjusted to military life more than those who had been discharged for being unsuitable. This study concluded that the adjustment of male homosexuals tended to be better or equal to that of male heterosexuals, and that female homosexuals tended to score somewhat lower on preservice adjustment compared with female heterosexuals. Females as a whole, however, tended to have better preservice adjustment than males as a whole. Female homosexuals, while having poorer adjustment than female heterosexuals, had better adjustment than male heterosexuals.

Sarbin and Carols,[33] in their summary of the military suitability of homosexuals, concluded that homosexual orientation is unrelated to military job performance, and that the main problem facing integration of homosexual individuals in the military is primarily maintaining group cohesion within the general military structure when an unpopular minority group is absorbed. Similarly, Herek,[16] in his review of the social science data, concluded that denial or restriction of government security clearances for gay people has no rational or empirical justification. He also concluded that lesbians and gay men are no more likely than heterosexuals to be subject to blackmail or coercion, to be unreliable or untrustworthy, or to be likely to disrespect or fail to uphold laws.

The work of Patterson, Fulcher, and Wainright[34] has examined whether lesbian and gay individuals function effectively as parents. The research in this area is not new, but in fact was one of the first public policy concerns to be researched. The findings are similar to the military issue: research has consistently supported a position that sexual orientation does not predict parental fitness.

These two areas have garnered the bulk of research on fitness for various situations as related to sexual orientation. In neither case is there indication that sexual orientation is related to fitness.

WHY DO THESE ISSUES MATTER? THEIR MEANINGS AND IMPLICATIONS

It seems clear that issues regarding sexual orientation that seem unresolved in the public perception are quite resolved and essentially nonissues in the consensus

of most behavioral scientists. In the sampling of issues covered in this paper, sexual orientation is unrelated to mental illness, sexual orientation is unrelated to the two aspects of fitness mot studied, parenting and military service, and attempts to change sexual orientation are ethically suspect of dubious efficacy and based on essentially fraudulent premises. There remain important and substantive questions regarding mental health and sexual orientation in areas such as mapping out how vulnerability and resiliency to health concerns work in sexual minority populations, and whether our current ways of defining and measuring the sexual orientations are accurate and optimal.

Yet such issues as these latter are virtually invisible in the public debates, and issues that to behavioral scientists are resolved have remained front and center in the public eye. What is going on here? I believe a closer examination of the issues underlying one of the topics covered in this paper, conversion therapy, might illuminate some of the latent issues here.

Religiously conservative ideologies typically are based upon certain values, which I suggest are incompatible with principles of scientific inquiry and professional psychological practice. Specifically, in faith-based thought, core aspects of understanding are theologically revealed, whereas in scientific inquiry, they are empirically derived. Theologically revealed truth is then the central operating principle around which understandings about various issues must align. There is no internal contradiction if arguments are circular, because at the center of this circle is truth.

Scientific reasoning, by contrast, assumes no central truth, and arguments must adhere to particular logical forms and methodological constraints, standing as valid on their own, without recourse to the validating anchor of a presumed central truth. Finally, faith-based thought rests on certainty about what is revealed. Scientific thought admits no ultimate certainty, as any finding can ultimately be usurped by another that is methodologically and empirically superior. Scientific thought, then, is at its core, evolving and ambiguous. I believe the above description is a fair characterization of certain aspects of conservative faith-based thought, although it may not be characteristic of other religious traditions. I am making no argument that such thought is necessarily flawed as theology, but that it is merely incompatible with scientific inquiry.

To pull these features together, I suggest that what is happening with the conversion therapy controversy is that conservative faith-based proponents offer an essentially tautological position, that their viewpoint must be accepted as one of a diverse range of options within psychology, in accordance with the psychological principle of respect for diversity. The point that is being overlooked is that respect for diversity does not require any scientifically based discipline to accept as scientific those positions which are not derived from

scientific principles. Further, I suggest that the espousal of the idea of diversity by conservative faith-based proponents is not truly an operating principle or a held value, but merely a temporary strategy, a ruse essentially, geared toward the acceptance of a nonscientific theologically based viewpoint as legitimate science. In fact, such conservative faith-based systems operate on the assumption that truth is theologically revealed, and that different perspectives must be incorrect. One does not have to read much between the lines in the conversion therapy literature to conclude that there is also a strong undercurrent that certain others (unconverted homosexuals, unbelievers in general) are considered second-class. The progression, then, seems to be to use a diversity argument to gain acceptance for nonscientific thought as scientific, so that diversity of both ideas and people can then be attacked from within psychology. Conversion therapy, then, is a kind of intellectual virus as it operates within the mental health profession, attempting to trick a host into gaining entry so that it can attack it from within using its own mechanisms.

I do not view the statement above as alarmist or harsh. Consider the emergence of conservative faith-based so-called scientific contributions that offer creationism as equivalent to evolutionary biology, and disinformation on women's reproductive health, educational reform, adolescent sexuality, and sexual orientation presented as scientific data. Such information might more properly be called "scientistic": information that mimics science, but is not science in methodology, principle, or intent. Control of science is important to conservative Christian hierarchies because raw advocacy of theocracy is distasteful to many, whereas theocracy in scientistic drag is seen as more politically palatable.

In the recent United States Supreme Court case[35] which overturned sodomy statutes, one of the bases for that decision was that orthodox religious tradition was not a persuasive enough basis to outweigh the other legal principles that sodomy statutes violated. Anglo-American law has a tradition of including religious tradition, to a limited degree, as one of the bases for its structure. Nevertheless, the Court in *Lawrence et al. v. Texas* stated, " . . . for centuries there have been powerful voices to condemn homosexual conduct as immoral. The condemnation has been shaped by religious beliefs, conceptions of right and acceptable behavior, and respect for the traditional family . . . These considerations do not answer the question before us, however. The issue is whether the majority may use the power of the State to enforce these views on the whole society through operation of the criminal code." Quoting from another case, the Court goes on to note, "Our obligation is to define the liberty of all, not to mandate our own moral code." Why should the behavioral sciences, which have never accepted religious tradition as a basis, even consider abdicating

professional responsibility to one variant of religious tradition, particularly one so at odds with the behavioral science's own traditions and methodologies?

What is at stake here is who will control science, specifically behavioral science. It is no accident where the battle lines are drawn. Sexual minorities remain the last target of societal bigotry that is socially acceptable in many quarters, and evolutionary biology is difficult to comprehend, easy to stereotype, and disquieting to many. These are ideal wedge issues to divide the general public from scientists and gain public support for theocratic control of science. A theocratically controlled or even theocratically influenced science is no science at all, however, but instead a weapon of theological enforcement.

What I am suggesting is that only those who operate via scientific principles have a legitimate place in the behavioral sciences, and those who aspire to manipulate and mimic science do not. This is what the considerable gulf between the behavioral sciences and public debate regarding sexual orientation is truly about.

ACKNOWLEDGMENTS

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Conclusion: How Might We Prevent Abnormal Behavior from Occurring and Developing?

Thomas G. Plante

This book series has tried to bring the contemporary world of abnormal psychology and behavior to you in an informative, updated, and understandable manner. Hopefully, you have learned much about how abnormal behavior impacts all those around us including those we care most about. The book has tried to articulate what is currently known about a wide variety of abnormal psychology topics so that you will be much better informed about these issues that are often discussed in the news and elsewhere.

After reading and reflecting on these important topics, one might wonder what can be done to minimize, eliminate, or prevent these kinds of problems from occurring. There is clearly no simple answer to this question. There are a variety of reasons why abnormal behavior emerges and develops. Some are due to biological or physiological factors such as genetics, hormonal and biochemical influences, and the exposure to both legal and illegal substances. Others are due to internal psychological conflicts associated with personality, mood, and stress mechanisms. Still others are due to the interactions of many social and interpersonal relationships with loved ones, work or school associates, neighbors, and community members. There are many different roads that lead to abnormal and problematic behavior. However, this does not mean that we can't do much more to improve the odds that abnormal behavior won't develop within ourselves and others. We clearly can make a better world for ourselves and for society if we can follow some key principles of prevention. After reading this book series and

carefully evaluating the advice of many leading experts, several important principles of prevention emerge as being especially important in preventing abnormal behavior from either developing or getting worse. While we cannot do justice to each prevention strategy articulated, we can at least introduce these seven principles to the reader. This list is not meant to be exhaustive or exclusive. It merely provides some very brief reflections and observations as well as prevention and coping principles.

AVOID ABUSE AND NEGLECT OF CHILDREN

As clearly articulated in several chapters of the series, the abuse and neglect of children occurs at alarming and disturbing rates. Abused and neglected children are much more likely to develop certain troubles with depression, anxiety, violence, substance abuse, interpersonal difficulties, and a host of other problem behaviors. Once developed, these problems impact others around them and can be passed on from generation to generation. Somehow, efforts must be increased to minimize child abuse and neglect. Public policy experts, child protection professionals, family attorneys, politicians, mental health professionals, and others must work closely to help children stay safe and to ensure that those entrusted with the welfare of children (e.g., parents, teachers, coaches, child care providers) are capable of providing the competent and effective care that children need, which is free from any abuse or neglect. While we can't totally eliminate child abuse and neglect, we can certainly try to minimize it by pooling our collective resources and expertise making a firm commitment to the safety and well-being of all children. Like a lot of things, it will take a selfless commitment of time, money, and other resources to make significant progress in this area. It will involve working with many different community, civic, religious, educational, law enforcement, mental health, political, and other agencies. Perhaps as former President Nixon argued for a "War on Cancer" or former President Johnson's "War on Poverty," we may need a "War on Child Abuse and Neglect."

MINIMIZE POVERTY

Those who are poor are less likely to have access to professional mental and physical health care services and are much more likely to be impacted by the stress that is associated with poverty (e.g., unemployment, poor housing, and exposure to community violence). As poverty levels increase and the gap between the rich and poor widens, it is likely that the psychological and behavioral problems associated with poverty will increase. Therefore, efforts to reduce poverty will likely minimize the development of or the worsening of a

variety of abnormal psychology problems. Again, politicians, business leaders, mental health professionals, family advocates, and others must somehow work together in order to minimize poverty both here and abroad. Perhaps former President Johnson's "War on Poverty" needs to be waged once again.

MINIMIZE EXPOSURE TO VIOLENCE

Sadly, we live in an often highly violent world. Violence is not only perpetrated during wars and in street crime but also in the seclusion and privacy of one's own home. Domestic violence, child abuse, date rape, and other kinds of violence are all too common. Furthermore, research has clearly indicated that exposure to violence through entertainment sources (e.g., movies, video games) also increases the risk of both violence and other mental health–related problems among vulnerable viewers. The entertainment industry, politicians, mental health professionals, family advocates, and others must somehow work together in order to minimize violence exposure in entertainment, in the media in general, and in both public communities and private homes.

DEVELOP AND NURTURE EFFECTIVE AND AFFORDABLE TREATMENTS (INCLUDING PHARMACEUTICALS)

The development of quality and effective intervention strategies including pharmaceutical agents has the potential ability to greatly reduce the impact of abnormal behavior, assuming these options are available to all those in need. For example, medications such as Prozac and other selective serotonin reuptake inhibitors have revolutionized the treatment of depressive disorders during the past decade and a half. These medications, while not perfect or right for everyone with depression, have greatly improved the odds of effectively dealing with a number of psychiatric troubles including obsessive-compulsive disorder, depression, bulimia, and so forth. Recent quality research using empirically supported psychological interventions has also demonstrated remarkable results for a wide variety of abnormal behavior problems. Quality behavioral and psychological interventions for panic disorder, depression, eating disorders, post-traumatic stress disorder, and many other problems are available. Research and development on affordable medications and psychosocial interventions to help those who suffer from abnormal behavior offer hope to not only those afflicted with these conditions but also to those loved ones who suffer too.

However, medications in particular can often too easily be seen as a magic pill to solve all problems. Medications can also be extremely expensive in the United States in particular. A careful and thoughtful effort to make appropriate

medications available to those who can truly benefit from them will likely help to minimize the severity of abnormal behavior for not only identified patients but also for all those who are connected to them via family, work, school, or other relationships. The best available research and practice is needed to ensure that interventions that can help people with abnormal behavior are readily available and used.

ALTER CULTURAL EXPECTATIONS ABOUT BEHAVIOR

In previous decades, children rode in cars without seat belts and rode their bikes without bike helmets. Parents physically hit their children at will and in public. People were allowed to smoke wherever they wanted to do so. Women who sought to work outside of the home were considered odd or too bold. Cultural expectations about how we live our lives that have impacted social customs and expectations can be applied to abnormal behavior risk factors as well. For example, violence exposure, maintaining zero tolerance for child abuse, alcohol and other substance abuse, poverty, and so forth may help to create a society where abnormal behavior cannot flourish. Public policy can be used to help decrease the odds that abnormal behavior risks are tolerated. Cultural expectations and policy decisions can be used to ensure that those who experience particular problems seek appropriate resources. There is too often a social taboo to request help from mental health professionals about abnormal psychology related problems. This resistance and avoidance tragically often allows potential problems to become more severe and serious.

AVOID EXPOSURE TO ABNORMAL PSYCHOLOGY RISK FACTORS

While Americans demand individual freedoms, exposure to particular risks increases the chance of abnormal behavior of developing. For example, legalized gambling in some form (e.g., Indian gaming, lotteries, Internet gambling) is now allowed in just about all states and is certainly not confined to Las Vegas and Atlantic City. Bars and liquor stores are open and available around the clock in just about every city. Pornography and online gambling are available on the Internet and thus just about everyone who has a computer or can get to one can be exposed to these influences. These trends increase the odds that those who are vulnerable to developing certain abnormal problems (e.g., alcoholism, pornography, gambling) will do so. As I have heard many times, "An alcoholic probably shouldn't work as a bartender." Controlling the environment so that temptations are not available very easily would go a long way in minimizing the development of many abnormal behavior problems. Furthermore, vulnerable

children and those with predilections to particular behavioral problems can all too easily access materials that can contribute to further abnormal psychology problems. Therefore, being thoughtful about the environmental influences that increase the odds of developing problems later in life should make all of us more sensitive to these influences.

MAXIMIZE ETHICS—ESPECIALLY SOCIAL RESPONSIBILITY AND CONCERN FOR OTHERS

At the end of the day, somehow we all must find a way to live together, sharing the planet and its resources. If we have any hope of living in a world that is humane and just and where abnormal behavior and problems are managed better and minimized, we'll need to maximize our social responsibility and concern for others. The ethical treatment of all persons and our efforts to make the world a better place for all will hopefully prevent or at least minimize many of the troubles associated with abnormal behavior. A global effort to support ethical interactions among all may help us better live with social responsibility and concern for others.

While abnormal behavior is likely to be with us forever, there is much that we can do as a society to minimize the possibility that abnormal behavior will develop in at-risk individuals and groups as well as to help those who experience these troubles. Mental health professionals working with others including public policy leaders, industries such as the pharmaceutical companies, and experts in many other fields can help a great deal. Can our culture and society make the commitment to do this? Let us hope so.

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Bradley Smith, *PhD,* is an associate professor in the department of psychology at the University of South Carolina. From 1993 to 1996, Dr. Smith was the clinical and research supervisor of the adolescent program at the Attention Deficit Disorder Program at the Western Psychiatric Institute and Clinic in the University of Pittsburgh Medical Center. Dr. Smith currently provides after school treatment for middle school students with learning or behavior problems, many of whom have attention-deficit/hyperactivity disorder (AD/HD). Dr. Smith's current scholarly interests are primarily focused on prevention or treatment of learning, behavior, and academic problems among adolescents and college students with AD/HD. Dr. Smith has published several journal articles on the diagnosis and treatment of AD/HD in adolescents and adults.

James E. Soukup, *PsyD,* is the founder and clinical director of Fairfield Psychological Center in Greensboro, North Carolina. He has a doctorate in psychology, a master of arts in counseling, and a master of business administration degree. In the past, he has served as a national trustee of Forest Institute of Psychology. He has also taught doctoral level courses in testing and psychometrics at the Adler Institute of Professional Psychology in Chicago, and was on the adjunct faculty. Dr. Soukup specializes in neuropsychological evaluation and treatment, and has developed a geriatric test battery for dementia in the elderly. He is the author of the books *Alzheimer's Disease: A Guide to Diagnosis, Management and Treatment* (Greenwood Press, 1996), and *Understanding and Living with People who are Mentally Ill* (1997). Dr. Soukup is currently involved in education and lecturing on the subject of Alzheimer's disease and dementia in the elderly.

About the Series Advisers

Patrick H. DeLeon, *PhD., ABPP, MPH, JD*, is a former president of the American Psychological Association and has served on Capitol Hill for over three decades working on health and educational policy issues. A fellow of the APA, he has been active within the APA governance, having been elected president of three practice divisions. A former editor of *Professional Psychology: Research and Practice*, he has been on the editorial board of the *American Psychologist* since 1981. He has received several APA Presidential citations as well as the APA Distinguished Professional and Public Interest Contributions awards. He has also been recognized by the leadership of professional nursing, social work, and optometry. He is a Distinguished Alumnus of the Purdue University School of Liberal Arts. He has authored in excess of 175 publications.

Nadine J. Kaslow, *PhD, ABPP,* is professor and chief psychologist at Emory University School of Medicine in the Department of Psychiatry and Behavioral Sciences. She is president of the American Board of Clinical Psychology, - former president of the Divisions of Clinical Psychology and of Family Psychology of the American Psychological Association, past chair of the Association of Psychology Postdoctoral and Internship Centers, and associate editor of the *Journal of Family Psychology*. Her research interests and numerous publications focus on the assessment and treatment of suicidal behavior in abused and non-abused women, family violence (intimate partner violence, child abuse), child and adolescent depression, and training issues in psychology. She is currently principal investigator on grants funded by the Centers for Disease Control and Prevention on the treatment of abused suicidal African American women, the

treatment of suicidal African American women. She is a licensed psychologist who maintains a psychotherapy practice in Atlanta, Georgia, for adolescents with eating disorders, adults, couples, and families.

Lori Goldfarb Plante, *PhD,* is a clinical lecturer at Stanford University School of Medicine. She conducts a private practice in clinical psychology in Menlo Park, California, where she specializes in the assessment and treatment of adolescents and young adults. She is the author of a book addressing chronic illness and disability within the family as well as the author of numerous professional articles on eating disorders, sexuality, and sexual abuse in adolescents and young adults.