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978-0-521-85892-2 - Drug Abuse: Concepts, Prevention, and Cessation

Steve Sussman and Susan L. Ames

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DRUG ABUSE

This text provides a thorough understanding of the parameters of drug abuse, broadly defined. Conceptual issues regarding definitions of drug use, misuse, abuse, and dependence are discussed in full. In addition, this text serves as a comprehensive source of information on the etiology, prevention, and cessation of drug abuse. It organizes etiologic, prevention, and cessation information into neurobiological, cognitive, microsocial, and macrosocial/physical environmental units. For example, modification of neurobiological, cognitive, social, and larger socioenvironmental and physical environmental influences are addressed in separate chapters. This text addresses a variety of theoretical bases currently applied to the development of prevention and cessation programs, specific program content from empirically based model programs, and program processes and modalities. It is hoped that this text will facilitate advancement in the arena of research on drug problems.

Steve Sussman, Ph.D., FAAHB, received his doctorate in social-clinical psychology from the University of Illinois at Chicago in 1984. He is a professor of preventive medicine and psychology at the University of Southern California. He studies the utility of empirical program development methods and the addictions broadly defined, including tobacco and other drug abuse etiology, prevention, and cessation. He has authored more than 300 publications. His projects include Towards No Tobacco Use, Towards No Drug Abuse, and Project EX, which are considered model programs at numerous agencies (e.g., Centers for Disease Control and Prevention, National Institute on Drug Abuse, National Cancer Institute, the Office of Juvenile Justice and Delinquency Prevention, Substance Abuse and Mental Health Administration, Center for Substance Abuse Prevention, Colorado and Maryland Blueprints, Health Canada, U.S. Department of Education, and various state departments of education). He received the honor of Research Laureate for the American Academy of Health Behavior in 2005 and is currently president of the academy (2007–2008).

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Preface

The topics of drug misuse and abuse are anchored by the terms used to define or describe them. Using current economic strain-type terminology, the annual economic cost of “drug abuse” has been estimated to be approximately \$600 billion worldwide and \$200 billion in the United States (Sussman & Ames, 2001). Approximately 70% of the costs are related to *decreased productivity* (illness, premature death, and incarceration), 10% are due to the *costs related to health care* (prevention, treatment, and hospitalization), and 20% of the costs are related to *property damage and enforcement efforts* (Office of National Drug Control Policy, 2001; Sussman & Ames, 2001).

Misuse of drugs by the general public incurs a notable percentage of these costs. For many people, drug misuse appears to be a voluntary, social behavior. There are people who feel reasonably comfortable with themselves and their lives but may misuse some drugs (particularly alcohol and tobacco but also other drugs, such as over-the-counter medications) on occasion as a part of celebratory rituals or to relieve disease symptoms. These people may have succumbed to social pressures to celebrate or may lack information on how to use a drug or drugs correctly, which could lead to negative consequences.

The misuse of drugs can lead to accidents and brief periods of nonproductivity. The probability of anyone suffering an accident that causes potential injury (usually minor) nears 100% over the course of many years. Many “normal” people consider “living life” and using a drug as increasing the likelihood of experiencing an accident. Of course, drug misuse may increase the odds of an accident occurring in the near future because of effects that may impair coordination and planning skills. Public campaigns that (1) attempt to make drug misuse a less acceptable behavior, (2) provide instruction on proper use of nonprescription and prescription drugs, or (3) provide means to reconcile the costs of prohibition with the costs to society morale and productivity are quite important to reduce drug use-related costs for a wide audience.

For many people, drug cessation also appears to be a voluntary, self-directed effort. Certainly, some of these people may die because they make unwise choices pertaining to their drug misuse. However, deaths among these people demonstrate a pattern of behavior in which drug use is a relatively minor part of their lives, more specifically that they hardly used drugs and/or used very little or that they often only used drugs on occasions socially deemed as appropriate. We doubt that everyone who is drunk on New Year’s Eve or at a rock concert is somehow physiologically abnormal and prone to negative drug consequences.

There are also some drug users who experience a more dramatic and elongated fate. Some people continue to misuse drugs even though they routinely experience negative consequences. In other words, they experience recurrent, consequential behavior that bewilders the drug user as well as the observer. A continuum notion of drug misuse helps in the clarification of behavior (Sussman & Ames, 2001). One may place drug misuse on a continuum of drug involvement, consisting perhaps of (1) frequency or quantity of use, (2) subjective degree of lack of control over frequency or quantity of use, (3) preoccupation with use to the exclusion of other activities, or (4) public consequences of use. People at one end of the continuum may misuse drugs as a participant in an occasional social event (e.g., a holiday). They may have subjective control over the occasion and the amount consumed, although they occasionally may overuse drugs and suffer the adverse consequences as a “mistake.” They may view each decision to use or overuse drugs as a conscious decision, not as an impulse over which they have no control.

Persons on the other end of the continuum use drugs frequently or use too much on most use occasions. They may report a subjective degree of lack of control over frequency or quantity of use, or perhaps they think they are in control; however, others observe their drug use as adversely and repetitively affecting their lives. They suffer numerous public consequences of use that hardly appear to be merely a rare mistake of judgment. They may try to limit their exposure to public settings to reduce the probability of public consequences. They may feel surprised, confused, or frustrated by the changes they experience in their behavior as a result of drug intake. If they try to reduce or discontinue their drug use, they may find, to their surprise, that they are unsuccessful.

Regarding recurrent and consequential drug misuse, researchers may have chosen the wrong outcome variable as the focus. In particular, drug abuse, drug misuse, or drug use may not be the right dependent (outcome) variable. “Drug abuse” generally refers to an official definition involving legal, social, safety, and role-based consequences stemming from recurrent drug use (American Psychiatric Association, 2000). This concept provides the rudiments for diagnosing a problem, but it does not provide three useful behavioral determinants of outcomes for more valid diagnoses: *etiology*, *process*, and *prognosis*. A variety of social and environmental variables predict diagnosable consequences of risky lifestyle behaviors that make identification of a consistent process for diagnosis difficult. For example, the behavior of getting drunk and using public transportation to get home likely has different consequences than the behavior of getting drunk and attempting to drive home. The likelihood of using public transportation is contingent in part on its availability. Of course, it might be difficult to defend an argument that adding a bus system can avert drug abuse. The point is that much of the variation in the behavior is unexplained when examining whether certain consequences occur, because very complex situational factors may affect the occurrence of consequences.

Another difficulty in establishing an etiology or process to a drug abuse diagnosis is that behavioral consequences are defined in part by the social context within which they occur. For example, drinking too much at a wedding may be considered appropriate in some groups, whereas it may be inappropriate in other groups. Further, a set of consequences describes or defines the result of a behavior but does not explain the reasons for the behavior that precedes the consequences (etiology). Many people in recovery from drug abuse will suggest that drug use was a solution “to the problem” at first. Unfortunately, even after drug use begins to cause more problems than it solves, physiological and psychological

dependence mechanisms make cessation extremely difficult for some people. Drug use behavior may then become a more attractive option than experiencing withdrawal symptoms (Sussman & Unger, 2004) or the unmedicated realization of the years of devastation one may have caused to self or others. (In addition, drug use may still feel good.) Thus, the etiology of trying drugs, continuing to use them, or maintaining drug use after consequences set in may differ and may not easily confirm or disconfirm a particular etiological system.

Using “drug misuse” as an outcome variable, although not bounded by an official set of criteria, is fraught with value-laden biases. That is, drug misuse to one person or in one culture may not be considered drug misuse to another person or in another culture. Any recreational drug use may be considered drug misuse to some groups (e.g., Church of the Latter Day Saints and Scientology) but may be considered normative to other groups (e.g., Rastafarians and the Church of Spiritual Enlightenment). Drug misuse also may vary in meaning over time (see Chapter 2 of this text on the ancient history of drug use).

Using the term *drug use* as an outcome variable could imply that all drug use is dangerous or immoral. It is useful to remember that at some points and locations in history, the mere use of a range of available psychoactive substances was labeled as deviance, with users being called “sinners,” which was then followed (e.g., in the United States in the 1920s) by a period of criminalization. The “medicalization” and “pathologization” of substance use (disorders) and users is a relatively recent process (e.g., Terry & Pellens, 1928). In summary, these three drug behavior terms do little to help explain the difficulties in living experienced by persons at the relatively “hopeless” end of the continuum.

Related work on problem behavior syndromes, process and substance addictions, and notions of substitute addictions suggests that people on that “problem” extreme of the continuum will engage in different behaviors that are problematic for very similar reasons (Sussman & Ames, 2001). These behaviors may include using various drugs, gambling, compulsive sex or shopping, or even out-of-control eating. What then should be the focus of our work if not drug abuse, drug misuse, or drug use *per se*?

This text intends to provide a better understanding of the parameters of drug abuse, broadly defined. Simply put for the moment, one may assert that substance abuse is a multifactorial biopsychosocial process that involves a variety of negative consequences to the individual or to the individual’s social environment, involving not only environmental and social influences that may be amenable to change but also intraindividual differences in susceptibility resulting from a complex interplay of genetic influences on neurobiological processes that affect personality, affect, and cognition. We present one general systems model that illustrates a process that can lead to and maintain problematic drug use.

In addition, this text serves as a comprehensive source of information on the prevention and cessation of tobacco and other substance abuse. Many of the intraindividual influences (e.g., neurobiological) are more difficult to change or simply are not changeable with current methods and technology, but nevertheless, they play a significant role in substance abuse vulnerability and eventually may be amenable to modification. Modification of neurobiological, cognitive, social, and larger socioenvironmental and physical environmental influences are addressed. This text addresses a variety of theoretical bases currently applied to the development of prevention and cessation programs, specific program content from empirically based model programs, and program processes and modalities (settings of delivery). We have organized etiologic, prevention, and cessation information into neurobiological, cognitive, microsocial, and macrosocial units.

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This text, although serving as a scholarly source for researchers, also intends to be of relevance to educated practitioners, drug dependency counselors, and students. The text provides a thorough, integrative perspective toward drug abuse and its prevention and cessation for different contexts and populations.

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This book is dedicated to the memory of Karen Anne Ames, a beloved sister, friend, and incredible scholar.