

BOOK REVIEWS

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Drug Abuse: Concepts, Prevention, and Cessation

By Steve Sussman and Susan L. Ames.
Cambridge University Press, 2008, 352 pages.

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As Sussman and Ames indicate, “The annual economic cost of drug abuse has been estimated to be approximately \$600 billion worldwide and \$200 billion in the United States” (p. vii). In an endeavor to provide a better understanding of the parameters of drug abuse, the authors wrote *Drug Abuse: Concepts, Prevention, and Cessation* to serve as a comprehensive source of information on the prevention and cessation of substance abuse.

Sussman and Ames’s work is divided into 5 sections: (1) Concepts and Classes of Drugs, (2) Etiology, (3) Prevention, (4) Cessation, and (5) Conclusions and the Future. Within the Etiology, Prevention, and Cessation sections there are subdivisions that consist of current concepts: neurobiological, cognitive processes, microsocial (social interaction and social groups), and macrosocial (large social and physical environment). Section 1, Concepts and Classes of Drugs, consists of 3 chapters. Chapter 1 provides information about the concepts of drugs, drug use,

misuse, and abuse. A wide range of content is covered, including a comprehensive explanation of drug terms and their descriptions. Chapter 2 outlines specific drug classifications relative to substance abuse and dependence and presents information about withdrawal symptoms for a range of drug types. Chapter 3 focuses on drug types, history of drug use, and misuse and offers information about the current direct and indirect costs of drug misuse nationally and internationally. Recent studies from other countries are also provided in this chapter. The authors report on the scope of drug use problems:

Around the world, approximately 15% of the population older than 18 years of age is considered to have serious drug use problems (other than nicotine addition, which itself may involve up to 25% of the world’s population), and this percentage has remained fairly constant since the early 1980s. Across the continents, the other major drugs of abuse are marijuana, amphetamines, cocaine, and heroin. Approximately 2.5% of the world’s population abuse marijuana, 0.5% abuse stimulants, 0.3% abuse cocaine or opioids, and up to 1.7% abuse other drugs (eg, inhalants, depressants, hallucinogens) (p.30).

Section 2, Etiology, consists of 6 chapters (4-9). Chapter 4 summarizes and presents examples of current multivariable etiologic models of drug abuse. A comparison chart with the general concepts and examples provides a thorough overview of the material. For instance, the PACE stage model “suggests that the development of a firm behavioral pattern of drug use is a function of four variables: pragmatics, attraction, communication, and expectation” (p.67). Chapters 5 and 6 discuss the neurobiology of addiction and cognitive information processing influencing drug use behavior. Sussman and Ames assert, “The extent to which an individual is responsive to reinforcing drug effects is partially genetically derived, involving metabolic and neurobiological variations that promote (or inhibit) drug use (or promote other behaviors such as gambling that, consequently,

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produce similar effects on one's neurobiology) and partially derive from drug use-related experiential learning, resulting in biological consequences of use" (p.69). Chapters 7 and 8 cover social interaction and social groups as well as the physical environment that have influence over drug use behavior. Chapter 9 covers the assessment of drug use, drug misuse, drug abuse, or drug dependence as outcome variables. According to the authors, various assessments are an essential element in examining the etiology of drug misuse. The 4 etiologic targets of assessment are the following domain types: neurobiologically based, cognitively based, socially based, and physical or social environmentally based (which are the subsections of the book). Health professionals strive to tap into the individual's motivations and perceptions of consequences by using specific structured assessments. The authors provide 2 tables in chapter 9, which list scale name, type and number of items, purpose of the assessment, and examples of content/domains. One table provides the types of scales typically used with alcoholism and the other table describes "other drug abuse" assessments.

Section 3, Prevention, comprises chapters 10-14. Although the etiology of drug use is central to the book, there is also a significant focus on prevention. Chapter 10 provides information on the concepts of prevention to increase understanding of the complexities relative to substance use behavior. Special attention is given to the differences in prevention and cessation programming. On the topic of message content, the authors expound:

One could conceive of a complete cross of substantive contents by modality for both prevention and cessation. The use of multiple prevention or cessation modalities is likely to maximize prevention or cessation effects in the long run (eg, as a means of institutionalizing programming) (p.143)...[A substantive content example is] response-contingent reinforcement approaches focus on reducing problem behaviors, such as drug use with extrinsic rewards such as money, prizes, or vouchers. Additionally, this approach can include differential reinforcement contingencies designed to strengthen more prosocial alternative behaviors. In attempting to reduce a problem behavior, the goal is to evaluate whether an offer of an extrinsic reinforcement or the possi-

bility of reinforcement to an individual will induce behavior change or decrease the prevalence or frequency of drug use (eg, Quit-and-Win Contest concept or contingency-based management where an individual is rewarded for desired behavioral changes.) (pp.142-143).

Chapter 11 emphasizes the neurobiological processes of inherited phenotypes that affect the type of prevention programming a practitioner provides. Six types of prevention programming include genetics, neurotransmission, delay, emotional learning, sensation seeking, and self-control. Chapter 12 examines the cognitive processes that affect emotion. Prevention efforts in this chapter provide strategies to redirect cognitive constructs to reinforce "purposeful" health behavior. Specific initiatives are discussed and may be implemented to counteract cognitive myths. The programming topics used to counteract destructive thinking are cognitive-information errors, cognitive processing limits, associative memory or drug implicit cognitive processes, nonoptimal decision making, belief-behavior congruence errors, and contextual/situational distortions. Chapter 13 addresses the dynamics of social influence in prevention programs. Programming examples from youth classroom teaching to advertising are noted. Specific social interaction and social group-related prevention programming types are comprehensive social influence, social network analysis, conscientiousness instruction, family-based, and community units inclusive prevention. Chapter 14 provides approaches to social and physical environment prevention. Prevention approaches focus on obtaining resources and supply reduction.

Section 4, Cessation, contains chapters 15-19. Chapter 15 concentrates on substance abuse cessation that has been associated with the consequences of use. The history of treatment is acknowledged as well as effective treatment strategies for today. Within chapter 16 neurobiological processes in relationship to cessation are identified. Specific guidelines are given regarding treatment of withdrawal, use of pharmacotherapy, and postacute withdrawal. Chapter 17 provides the techniques used in the cognitive-behavioral processes used in cessation. Cognitive-behavioral interventions, cue exposure/cue reactivity approaches, cognitive cop-

ing programs, and relapse prevention are highlighted in this chapter. The authors explain why these approaches are important:

An individual who has been abusing or is dependent on alcohol or other drugs may spend a great deal of time thinking about drugs, drug rituals, and drug-related life circumstances. To give up drug use may then conflict or be inconsistent with the many thoughts nurtured that associate drug use with primary daily activities, which may cause a subjective experiential void. Experiencing life over long periods of time without drug use would help in creating new associative cognitive structures and memories that might be protective against future drug abuse (p.237).

Chapter 18 discusses the social interaction and social groups that provide substance abuse cessation. The 2 specific cessation methods that were discussed include the Johnson Institute and motivational intervention, and the 12-step recovery group model. Various therapeutic treatment modalities are outlined. Chapter 19 encompasses the treatment options from a larger societal perspective. Treatment settings for programming, geographic information system applications, and large-scale policies are central to substance abuse cessation. Section 5 concludes with chapter 20. Chapter 20 states the conclusions and future directions in substance abuse etiology, prevention, and cessation. Special emphasis is given to the issue of possible prevention and treatment options by specific age-groups.

A particular strength of this book is

that it is written in such a way that it can serve as a practical resource guide. Each of the chapters begins with a brief overview of the chapter and concludes with a useful summary. The distinct sections provide an integrated approach to understanding the comprehensive approaches available to assist in preventing drug misuse as well as helping those who abuse drugs. In addition, an integration of examples and content application is central to the text. One item the reader may want to note is that titles and subtitles are repeated within the book, which seems to effectively communicate the information. Furthermore, chapter subsections have the same picture/line drawing, which may act as a visual cue to assist the reader in assimilating the material in its entirety by topic area.

Drug Abuse: Concepts, Prevention, and Cessation makes an excellent contribution to the field and will be of value to a variety of health professionals. The book provides current information in an integrative perspective toward drug abuse and its prevention and cessation, and it is a valuable scholarly resource for both researchers and practitioners. For drug dependency counselors, it will be an excellent tool to help them plan therapy sessions with clients. Academics might use it in undergraduate and graduate research courses to illustrate the issues typically faced in different contexts and for diverse populations.

REFERENCE

Sussman S, Ames S. *Drug Abuse: Concepts, Prevention, and Cessation*. Cambridge University Press. 2008.