

# Preface

There are a number of reasons why this book is important. First, there is no one source that summarizes what we know about the prevention of substance abuse from the research field, so the book serves as a repository of accumulated knowledge on prevention theory, intervention design, and development and prevention research methodology. Second, as an evolving field, prevention science has only begun to assert itself in both the arenas of practice and policy. The formation of the Society for Prevention Research in 1991 was the first recognition that a science of prevention existed and required a separate forum to present the rapidly growing content of the field for discussion and review. Finally, there is a need to establish a baseline, a reference point against which progress in the field of prevention science can be assessed. This book serves all of these purposes.

The idea for this book grew from the observation in the early 1990s that after decades of attempts to develop effective interventions to prevent drug use among children and adolescents in the United States that we were finally having success, particularly in addressing the initiation of use. These successes are the result of research that has provided a better understanding of the factors and processes associated with the onset of substance use. The convergence of accumulating and consistent epidemiologic information regarding trends in substance use, sequential use patterns and vulnerability and protection and the progress being made in developing behavior theory and research on curriculum design have influenced this achievement. These accomplishments however, should not be viewed as final. The work completed to date only lays a foundation on which the whole field of drug use prevention is built. There remain many gaps in our knowledge base: gaps that unless filled, can greatly diminish the impact of what we have learned so far. Among the most prominent gaps are the development of interventions that target children and adolescents at high risk to substance use; understanding the differential response to interventions by gender, age and ethnicity; and understanding the impact of multiple interventions within the community context. Furthermore, drug abuse prevention programming must also be flexible to reflect changing trends in types of drugs being used and the growing knowledge regarding the biological processes and implications of drug use.

Given the previous, this *Handbook* had been conceived as documentation of the current knowledge in the field of drug use prevention and addresses specifically the gap areas. It is seen as a “work in progress” and as a snapshot of prevention science at the beginning of the 21st century. The book is designed to cover a broad range of subjects from theory to practice. It is written to

respond to the needs of researchers, practitioners, policymakers, students, and the lay public. It can be used in academic institutions as a text in courses on drug abuse and drug abuse prevention and as a reference source for both practitioners and policymakers.

The book is organized around eight major areas: Historical Overview, Social Contexts of Prevention, Prevention as Social Control, Theoretical and Empirical Foundations, Special Populations, Interactions between Biology and Social Context—Risks for Multiple Behavioral and Mental Disorders, Research Design, Measurement, and Data Analytic Issues, and Drug Abuse Prevention: A Look into the Future. The authors of each chapter were specifically invited to review each of their areas of interest and to reflect on implications for future prevention planning.

The first chapter by Bukoski provides an historical framework for the content of the book, setting a base against which the progress of the field of prevention and prevention science can be assessed. In this chapter Bukoski talks about the struggling science and the first glimmerings of success. He then takes the reader to explore how findings from emergent biological and neuroscience research may impact the future of prevention. The next section of the book, Social Contexts of Prevention, presents eight chapters discussing a variety of settings in which prevention takes place. The discussions within each of these chapters presents the special attributes of each context and presents the findings from research with demonstrated impact on precursors to substance abuse or to substance abuse behaviors themselves. Palmgreen and Donohew discuss the role of the media both as a vehicle for prevention messages and as an intervention per se. The school is one of the most prevalent contexts for prevention interventions. Botvin and Griffith present findings from this body of drug abuse prevention research in their chapter. Kumpfer and Alder provide a view of the family as an important means to address the needs of children at risk for substance use. Oetting and Lynch explore peer networks or clusters as major sources of influence on substance using patterns and also as major avenues for reaching adolescents with prevention messages and establishing antisubstance use norms. Both Arthur and his associates and Kibel and Holder look to the community for support of prevention efforts. Arthur et al. discuss the organic and rich nature of communities to plan for prevention programming that meets the specific needs of each community. One of the major ways to use available resources within the community is to establish and strategically implement policies that curtail the sale and use of substances such as alcohol and tobacco. Cook and Catalano et al. write about two novel contexts for prevention programming, the work place and drug abuse treatment facilities.

At the time of the writing of these chapters, only drug testing and “no-use” policies had been researched for the section, Prevention as Social Control. Dupont and Saylor and Pentz present excellent discussions of these two under-researched areas. However, there are other areas such as law enforcement that are even less researched or understood that will be explored in the future and included in later editions of either this or other handbooks on prevention.

It was mentioned earlier that the progress made in the last decade was heavily dependent on understanding the various pathways to drug use and abuse. The section, Theoretical and Empirical Foundations, presents this knowledge base. Sloboda provides a picture of how epidemiologic findings have served and continue to serve prevention. Brook and her colleagues focus on risk and protective factors examining how these relate to drug use over time. Flay and Petraitis discuss the important role theory has played and continues to play in the development of effective prevention programming. The importance of childhood aggression, lack of social competence in children, and certain negative parenting practices have been found to be related to substance abuse in adolescence. Lochman discusses this research and the types of effective preventive strategies that intervene to disrupt the trajectory to substance abuse from childhood behavioral disorders. The final chapter in this section by Berkowitz and Begun puts prevention programming within a developmental framework. Although the emphasis is on childhood and adolescence, the entire

lifespan is addressed. Each period in development has its challenges, and these authors draw from the research literature to address the design of appropriate and relevant prevention interventions.

Much of the research in the development of effective preventive interventions either has focused on Whites, or the majority population, or has failed to specifically explore prevention strategies for specific cultural and social groups. The next section, *Special Populations*, discusses the epidemiology of drug use and abuse among several of these populations and, where such research exists, presents the findings from studies of prevention programs. More often, the research that has examined the impact of prevention programs on these groups is sparse. In each chapter the authors recommend how the particular needs of these groups can be more effectively incorporated into prevention strategies. Rohrbach and Milam review the differences in drug use patterns by gender and in response to both drug abuse prevention and treatment programs. They conclude by discussing the implications of these findings for prevention design and practice. The next chapters in this section take a similar approach in examining prevention. Martinez and his colleagues review the problem as it relates to Latino youth; Turner and Hensch discuss substance abuse and prevention for African-Americans; Beauvais and Trimble address the needs of American Indian Youth; and, Chen, Asian- and Pacific Islander-Americans.

Some of the most challenging issues that confront prevention researchers and practitioners today are coming out of the biological and epidemiologic research. These include new knowledge regarding the relationship between drugs and the brain and between drug use and other problem behaviors. These issues are covered in the next section, *Interaction between Biology and Social Context—Risks for Multiple Behavioral and Mental Disorders*. Bardo et al. focus on drug abuse and its biologic basis. They discuss how the results of basic biological research impacts prevention for those at high risk to drug abuse. The next chapter by Kessler et al. presents the findings from surveys conducted through the International Consortium in Psychiatric Epidemiology specifically examining the relationship between substance use disorders and mental disorders. Implications for prevention are discussed. These chapters lead to Tarter and his associates' discussion of the role of genetics and the family as underlying contributors to drug abuse. The need for specialized prevention approaches for those at particular high risk to substance abuse had been recognized, but few effective programs have been developed. The final chapter in this section by Eggert and Randell present their experience in reaching youth at high risk and discuss their programs and outcome studies.

Along with the advances in prevention theory development and in forming a strong research foundation for prevention programming, research, and statistical methodologies also have progressed greatly over the past 10 to 15 years. This accumulated knowledge is presented in the next section, *Research Design, Measurement, and Data Analytic Issues*. The section begins with a chapter by Brown, who provides a conceptual framework for addressing key concerns in the design of prevention research field trials. MacKinnon and Dwyer next discuss the major data analysis issues that face prevention researchers in the "real" world. Collins and Flaherty in their chapter, *Methodological Considerations in Prevention Research*, conceptually take the reader from theory and modeling to the important process of developing measurements from the theory and finally the exploration of the relationships among multiple measures that form the theory. Schinke and Cole discuss research design issues related to the dissemination of prevention practices in the real world. The chapter by Dishion and associates demonstrates the importance of multiple measures using their family management practice prevention program as an example. Duncan and his colleagues in their chapter then discuss power analysis models and methods appropriate for preventive intervention field trials.

Where do we go from here? In the section, *Drug Abuse Prevention: A Look into the Future*, the chapters by Bosworth and Held take on two timely but difficult topics. Bosworth explores the

use of computers in prevention, presenting how computers are used in education to heighten the learning experience and how they can serve to improve prevention delivery. Finally, in her chapter, Held focuses on the dissemination of the findings from prevention research and on the diffusion of effective prevention programming from the controlled setting of the research study to the community. At a time when the field has evidence of success and when this evidence has been made available to practitioners and policymakers through a number of information channels and professional networks, the widespread implementation of programs with demonstrated positive long-term outcomes has not been achieved. A number of barriers to diffusion and potential solutions to overcome them are discussed.

The editors and contributors to this book want to share their knowledge with several communities; other researchers both in the field of drug abuse prevention and in the broader areas of health promotion and education, practitioners who translate this research for the special needs of their communities, and for policymakers who may be skeptical about the progress being made in the field of drug abuse prevention. The field has formed its own professional group, the Society for Prevention Research. This group has become a major forum for establishing dialogues among researchers and has become an impetus for the development of the science of prevention. The future for progress in understanding drug abuse processes and to advance our strategies for preventing drug abuse is bright. Key areas with potential for the field include understanding the structures of communities so they can support prevention programming, linking the growing knowledge about the biological and genetic bases of drug abuse to prevention approaches and creating statistical methodologies that are more sensitive and specific to the needs of prevention researchers.

**ZILI SLOBODA**



<http://www.springer.com/978-0-306-47342-5>

Handbook of Drug Abuse Prevention

Sloboda, Z.; Bukoski, W.J. (Eds.)

2006, XXVIII, 692 p., Hardcover

ISBN: 978-0-306-47342-5