Book Review


This book is the product of work begun in 1995 when the Institute of Medicine (IOM) formed a committee at the request of the National Institute on Drug Abuse (NIDA) to summarize the current state of knowledge and propose a drug abuse research agenda to guide research efforts and institutional funding priorities into the 21st century. IOM accomplished this task through the work of a 16-member committee and a 7-member advisory group, many of whom are renowned NIDA-funded investigators in various areas of drug abuse research. Although the book has multiple contributors and covers a very wide range of drug abuse issues, it has a fairly consistent voice and is uniformly well written. The book uses a public health model to organize the diverse fields of study, evaluate research accomplishments, and identify priority areas for further study. The committee struggles admirably to integrate diverse fields into a coherent framework. The book sticks very closely to NIDA’s research agenda priorities and repeatedly praises NIDA’s accomplishments. Like a grant proposal, it walks a fine line between being an excellent, scholarly summary of significant advances and being a political sales job. At times, the book suffers from a lack of clarity regarding its primary target audience. With the exception of the Introduction and Executive Summary, it is written at a scientific level that would make it difficult for an educated lay person to decide whether an investment in drug abuse research has been cost-effective.

For a scientific audience, each section provides an excellent summary of the major findings as well as recommendations regarding priority areas within each research domain. Behavioral Research reviews drug self-administration and discrimination research on mechanisms of initiation, drug seeking, transition to abuse/dependence, tolerance, abuse liability, withdrawal, and conditioned craving. This excellent chapter provides a coherent organization of material and attempts an integration of the different areas in subsequent chapters. Neuroscience reviews molecular-, cellular-, and system-level research on drug actions, brain motivational systems, neurotransmitter and second messenger systems, the neurobiology of drug reinforcement and neuroadaptation associated with tolerance and dependence, and
the neural substrates of vulnerability and resilience factors. This chapter also pro-
vides a very good, comprehensive, yet succinct summary of a lot of information,
although difficult for nonscientific readers.

Epidemiology reviews general and specific population surveys on drug
availability and initiation, cooccurring psychiatric disorders, and the identification
of populations at risk for abuse and dependence on which much more research
is needed. In comparison to other chapters, relatively few recommendations are
made other than continued survey research, leaving the impression of little room
in the field for new or creative ideas or investigators. Etiology discusses the
biological, psychosocial, and contextual risk and protective factors for drug use,
abuse, and dependence, particularly family and psychopathology factors. This
field has historically focused on risk factors for drug use or initiation, and future
research is strongly recommended on risk factors for abuse/dependence and for
studies of resilience at all levels. This is a pivotal chapter in the book, providing
the connection between basic and applied research. Prevention reviews different
models and the need to evaluate their relative cost-effectiveness and move
beyond an overemphasis on preventing initiation to include the transition from
use to problem use.

Consequences reviews HIV and risk reduction strategies, fetal and child
development effects of drug and lifestyle exposure, and violence. This narrow
focus on problems of high national interest and cost to society is both consistent
with NIDA’s agenda and a more realistic strategy than trying to cover the full
range of substance-related consequences in a short chapter. Treatment discusses
its cost-effectiveness and the importance of research on matching psychosocial
treatments, medication development, and treatment for cooccurring disorders
and special populations. Managed Care is an excellent summary for those
unfamiliar with the basics of managed care and the need to evaluate issues
related to quality of care, cost shifting, and placement criteria. The empirical
evaluation of the cost-effectiveness of managed care is a relatively wide open
area of research, but one with many impediments. Drug Control discusses the
issues related to the legal and regulatory status of certain medications and illicit
drugs and the cost-effectiveness of supply reduction for reducing drug use.
Through the public health model, it presses for an integration of criminal justice
and drug abuse research agendas through policy research and integrative service
approaches. David Musto’s characteristically insightful historical perspective brings
nice closure to this informative volume.

Consistent with its public health focus, there is a strong emphasis on a medical
or disease model of drug abuse. Although the political and financial advantages of
espousing this model are obvious, the points at which this model is stressed to its
conceptual breaking point within a public health perspective are not fully discussed.
Also unexplored are the consequences of rigid adherence to a medical model when
working collaboratively within a broader systems context. Although much needs
to be done to educate the treatment, political, and criminal justice community
about addictions as medical diseases requiring treatment, a view of other models
as presenting barriers to the “real work” is not a helpful stance. Nonetheless, this
book should be a valuable resource for students considering a career in drug abuse