## Drug Addiction and Drug Policy: The Struggle to Control Dependence

## Edited by Philip B. Heymann and William N. Brownsberger

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As a major public health scourge of the 20th and presumably 21st centuries, drug addiction costs the United States billions of dollars in confronting medical illnesses, social problems and crime. Editors Heymann and Brownsberger state that the authors of this book wish to "add new factual information, clarify concepts, [and be] rigorous in their forms of persuasion, and [in] wrestling with ethical issues," However, many of these wishes of the authors and editors fall short of being met.

Much of the book's thesis is built on false premises that refute the well-established understanding of addiction as a disease and chronic relapsing disorder, significantly diminishing the book's impact. Defining addiction as a disease by no means absolves addicts of responsibility for their actions, affects how an addict responds to incentives or limits addicts' abilities to make choices in their lives. Unfortunately, most of the authors adhere to an old conceptual distortion in the field of drug addiction, which detracts from other interesting and innovative ideas found within. Another major fault of the book is its virtual lack of consideration of alcohol and tobacco addiction. which cause by far the greatest harm to society and public health.

In a chapter riddled with inaccuracies, non-sequiturs and faults of logic, Satel argues that addiction is not a brain disease. Such ideas move the clock of addiction research back 30 years. All psychiatric and behavioral disorders are brain diseases in which the brain physiology changes, regardless of etiology (see any medical definition of 'disease'). In obsessive-compulsive disorder, for instance, behavioral and pharmacological treatments reverse clinical symptoms as well as PET-scan measured 'hot' activity in the cortical-striatal loop of the brain. Satel argues that the brain-disease model leads to overemphasis on pharmacological intervention and diverts attention from promising behavioral therapies. However, current comprehensive treatment programs for alcoholism or smoking cessation involve both behavioral and pharmacological treatments, and most clinical trials employ both. With regard to the neuroadaptations associated with addiction, such as drug withdrawal, Satel misses the point, focusing instead on the 'physical-signs-of-withdrawal' red herring. Key brain changes in addiction are known to revolve around motivational withdrawal; for example negative affective states which are common elements of all addictions. Finally, this chapter's citation of Time magazine as a scientific reference describing the status of the field would seem unscholarly at best; missing are any references to primary research.

To argue that 'real' diseases such as cancer and epilepsy result from abnormal physiological processes, whereas drug abuse produces only deranged physiology, is equally false. Our present epidemics of Type II dia-

betes and heart disease are directly analogous to drug addiction-"choices" in diet and eating habits produce a "deranged physiology" resulting in these diseases. Satel's misguided argument that addiction entails a 'no-fault' concept absolving one of responsibility is another red herring. Heart disease and diabetes are diseases,

which does not in any way imply 'no-fault'. Appropriate behavioral and drug treatments for heart disease include proper diet, proper exercise and, if the genetics have a role, a pharmaceutical boost to help control cholesterol. Similar issues arise with diabetes. Satel's discussion of medications is also poorly informed, excluding promising treatments for alcoholism (naltrexone, acamprosate) and nicotine addiction (transdermal patch, buproprion).

The argument in the chapter by Heyman that addiction is not a chronic relapsing disorder is inadequate, contradicted by a subsequent chapter and harmful to the field. An alternative explanation for the lack of relapse in returning Vietnam veterans is the role of conditioning factors involved in relapse, not a general lack of relapse in opiate addicts. In a subsequent chapter, Valliant follows 100 opiate addicts for 40 years; after 12 years, 97 of 100 had relapsed, and after 18 years, 87% had relapsed within a year. If this is not a chronic relapsing disorder, what is? Heyman also completely ignores relapse data for alcohol and tobacco, major drugs of addiction.

On a more positive note, once the authors move away from their focus on addiction as neither a chronic relapsing disorder nor a brain disease, the book improves dramatically. Kleiman thoughtfully and innovatively advocates the concept of coerced abstinence. From a biological perspective, limiting access to drugs would curb dependence and limit the neuroadaptive sequelae that continue to drive the addiction cycle. Brownsberger cogently argues for limiting the coerced abstinence approach to heavy users, and suggests that a coerced-abstinence screening program limited to serious offenders might be most cost justifiable. He critically points out that there is a continuum of use levels which correlates with continuums of dependence, personal harm and criminal-offending rates. Again, the biology also suggests that enforced abstinence is more likely to have a large impact on neuroadaptive processes in brain reward

> systems that drive addiction, when applied to heavy users. Caulkins and Heymann further elaborate upon the continuum in severity of punishments of dealers—no single punishment fits all drug users/abusers.

> Other chapters of merit include a clear map of prevention concepts, and elaborations of the differences between 'harm reduction' and 'use reduction' policies, and among primary, secondary and tertiary prevention. Moore broaches the

problem of how addiction-prevention policy must change in the face of epidemic situations, with a clear emphasis on changes in supply. Boyum and Reuter make the critical point that drug programs are inextricably linked to social-policy programs, with both positive and negative interactions.

The value of this book is its presentation of an important perspective regarding social policy: Drug use, abuse and addiction are entities that need to be addressed separately at all levels of analysis. This should be of interest not only to social psychologists, but to addiction researchers and medical professionals in general. However, this work is doubly flawed: first, false premises (that addiction is neither a chronic relapsing disorder nor a brain disease) permeate much of the book; and second, by largely ignoring the legal drugs of addiction, alcohol and tobacco. Although the social policy perspective is a step forward, these flaws are two steps back.

