

BOOK REVIEWS

An Ongoing Debate

Marijuana Myths, Marijuana Fact. A Review of the Scientific Evidence. LYNN ZIMMER and JOHN P. MORGAN. Lindesmith Center, New York, 1997. xvi, 245 pp. Paper, \$12.95. ISBN 0-9641568-4-9.

Attitudes toward marijuana use have divided Americans for over two decades. In the early 1970s when marijuana use was widespread a presidential commission recommended that it be decriminalized. During the 1980s "zero tolerance" was shown toward the use of marijuana and other illicit drugs. This strategy was supported by parents' groups and scientists who argued that marijuana use was harmful, especially to the young, and hence was to be discouraged by all available means.

The authors of the book under review argue that the risks of marijuana use have been grossly exaggerated in support of zero tolerance. The book is a primer of "facts" to counter the "myths" that the authors believe have been promulgated by proponents of marijuana prohibition. It presents 20 "marijuana myths," followed in each case by "facts" based upon the authors' review of the scientific literature. The reader will need to consult other sources to better understand the argument, since the myths are represented by a selection of brief quotations at the beginning of each chapter.

The major problem with any presentation of "myths" and "facts" in this highly contested area is the uncertainty that still surrounds the effects of long-term heavy marijuana use. Such effects in humans have not been as well studied as the acute effects. Most research on the health effects of chronic marijuana use was conducted on animals in the late 1970s and early 1980s, well before the cannabinoid receptor and endogenous ligand were discovered. These studies involved administering large oral doses of tetrahydrocannabinol and cannabinoid preparations to animals and measuring their effects on a wide range of health outcomes. Their results were often inconclusive, and they were in any case of uncertain relevance to human

users. Funding for epidemiological research on the health effects of human marijuana use declined as the cocaine and crack epidemic unfolded. Consequently, there have been very few studies of the long-term effects of marijuana use, apart from Tashkin's studies of its respiratory effects and Kandel and others' longitudinal studies of the adult consequences of adolescent marijuana use.

The authors make a reasonable case that many widely disseminated views about the risks of marijuana are exaggerated or, at the very least, worst-case interpretations of equivocal evidence. But the presentation in terms of myths and facts means that nuances in the evidence are missed. The authors are

inclined to assume that the absence of evidence of harm from the more prevalent intermittent marijuana use indicates absence of harm in the very small proportion of the population who currently engage in long-term heavy use. Two examples show the limitations of reducing the debate about the health risks of marijuana to a simple contrast between "myths" and "facts."

The most probable adverse effects of long-term sustained marijuana use are respiratory diseases, such as bronchitis and possibly cancer (although probably not obstructive pulmonary disease). Smoking is the primary route of administration, and there are strong similarities between the carcinogenic and toxic constituents of tobacco and marijuana smoke. The respiratory risks are undoubtedly small for the majority of marijuana smokers who smoke intermittently and discontinue their use in the mid to late 20s. It is difficult to estimate the respiratory risks for the minority who smoke marijuana daily over decades, because most are also tobacco smokers. Hence it is probably true, as the authors argue, that *on current patterns of use* marijuana is a minor contributor to respiratory disease by comparison with tobacco. But this does not mean that marijuana use is benign for those who smoke it regularly over decades, especially when they also smoke tobacco. Nor does it mean that the public health impact of marijuana smoking on respira-

tory disease would remain small if its use increased under a legal regime that allowed its widespread promotion, sale, and use.

The dependence potential of marijuana has at times been exaggerated. Epidemiological evidence suggests that the risk is considerably less than that posed by tobacco and heroin, cocaine, or alcohol. Nonetheless, a preoccupation with whether marijuana users do or do not experience withdrawal symptoms has distracted attention from the fact that a minority of users (perhaps 10 percent of those who ever use and more of those who use regularly) do experience difficulties in controlling their use. They use more marijuana than they would like to, continue to use it to the detriment of their physical health and well-being, find it difficult to stop, and are seeking help to stop in increasing numbers. It would be remarkable if marijuana did not have a dependence potential given that it is widely used like alcohol for its euphoric and relaxing effects. Honesty demands that the risk of dependence be acknowledged, even if it may be used by the authors' opponents to argue for a continuation of prohibition.

The reader who wants a clearly written rebuttal of some of the exaggerated claims offered in support of current U.S. marijuana policy will find this book useful. But those who want a disinterested appraisal of the most probable health hazards of long-term daily marijuana use will not. It is doubtful given the uncertainties with the evidence that a "disinterested" book could be produced. Even if it could, it is even more doubtful that it would be accepted as such by partisans on either side of the long-running debate about the magnitude of the health risks posed by marijuana use.

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Also Noteworthy

Dugs of Abuse. Simon Wills. Pharmaceutical Press, London, 1997 (U.S. distributor, Rittenhouse Book Distributors, King of Prussia, PA). xiv, 262 pp., illus. Paper, \$32 or £16.95. ISBN 0-85369-352-8.

An overview, aimed at health-care professionals, of usage and effects of 18 categories of drugs, including volatile substances, performance-enhancers, prescription and over-the-counter medications, caffeine, tobacco, and alcohol, with information on treatments for dependence and other relevant matters.



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