Encyclopedia of Substance Abuse Prevention, Treatment, & Recovery

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Sage Publications, 2009
Decriminalization

The decriminalization of drugs refers to a spectrum of laws and law enforcement strategies that are designed to reduce penalties associated with the criminalization of drug-related behaviors. The extent of criminalization varies according to drug type; for many drugs, including alcohol and most opioids, distribution, and use are permitted in some circumstances and sanctioned in others, whereas the manufacture and use of other widely used drugs, such as cannabis and cocaine, are criminalized in almost all contexts. The criteria by which drugs are matched with sanctions have been the subject of controversy, and current criminalization policies have been widely criticized as being arbitrary and counterproductive. Alternatives to criminalization generally fall into the categories of decriminalization or legalization. Advocates of legalization typically envision a system akin to current approaches to alcohol and tobacco wherein drugs are legal, regulated, and taxed. In contrast, those who favor decriminalization aim to reduce negative social consequences related to drug use without explicitly permitting that use. As such, decriminalization might be considered to be an attenuated form of criminalization. Indeed, many decriminalization policies maintain harsh criminal sanctions for a broad array of drug-related behaviors.

Decriminalization policies vary across nations and regions and according to type of drug and type of drug-related behavior. Most jurisdictions that purport to engage in decriminalization require one or more of three approaches to the attenuation of drug-related social consequences. The first approach is elimination, in which criminal penalties are eliminated for a subset of drug-related behaviors. The second approach is replacement, in which criminal sanctions are replaced with civil sanctions. The third approach is reduction, in which sanctions are reduced in severity but retain criminal status. The extent to which a given decriminalization policy conforms to any one of these approaches varies according to the type of drug and the nature of the drug-related behavior. For example, a given decriminalization initiative might eliminate sanctions for possession of cannabis, replace sanctions for distribution of cannabis, and reduce sanctions for possession of cocaine. This diversity of approaches complicates discussion of decriminalization and related consequences.

International Decriminalization Policies

Because much of the discussion surrounding decriminalization centers on the regulation of cannabis, a brief history of cannabis regulation provides a useful backdrop for the discussion of international approaches to decriminalization. The recreational use of drugs has continued in various forms for millennia. In this context, criminalization represents a relatively recent, and anomalous, development in social responses to drug use. Indeed, although cannabis use can be reliably traced back for millennia, the active prohibition of cannabis did not begin in earnest until the early 20th century. The Marihuana Tax Act of the 1930s, which effectively banned cannabis for recreational and medical purposes in the United States, is a seminal document in the history of cannabis criminalization. In the early 1960s, many nations followed the course set out by this document and joined the United Nations Single Convention on Narcotic Drugs, which internationalized the approach set out by the Marihuana Tax Act and expanded it to include most recreational drugs. The wholesale prohibition of these widely used substances quickly drew considerable opposition, and this opposition provided much of the nucleus of the current decriminalization and legalization movements.
Europe

Since the early 1970s, there has been a general trend toward the decriminalization of recreational drug use in Europe. However, as the following examples illustrate, the meaning and scope of decriminalization vary considerably across European nations. In Italy, the possession of small amounts of recreational drugs draws administrative, rather than criminal, sanctions. In Spain, possession of small amounts of recreational drugs is not penalized; however, public use is subject to administrative fines. In Portugal, apprehended drug users have no contact with the criminal justice system and instead appear before an administrative body of medical and legal professionals who administer sanctions ranging from fines to the suspension of driver's licenses and travel rights. In Belgium, cannabis use is technically a crime, but possession of small amounts results in a warning and on-the-spot fine. Russia has decriminalized possession of small amounts of most recreational drugs and has replaced criminal sanctions with fines or community service.

In other European countries, although drug possession is technically illegal, drug laws are routinely not enforced, amounting to de facto decriminalization. The Netherlands provides a well-known example of this approach. Although possession and sale of cannabis is technically illegal, several districts have enacted a formal, written policy of nonenforcement of the possession and sale of up to 30 grams. The sale of small amounts is also tolerated in coffee shops as long as the shops comply with regulations that include not advertising their products, not selling cannabis to persons under 18, and not selling any other drugs. In the United Kingdom, drug possession is a crime, but there is a presumption against arrest for cannabis possession and the common police responses involve warnings, diversions to social services, or no action at all. In Germany, possession of recreational drugs is criminal, but the Supreme Constitutional Court held that charges for possession of small amounts must be dismissed. These examples illustrate the types of approaches to decriminalization in Europe.

North America

North America has also seen an increase in support for decriminalization over the past several decades. However, the focus has been almost exclusively on cannabis. In the United States, 12 states have decriminalized cannabis. Some decriminalization states, such as Maine and New York, have replaced criminal sanctions with civil fines. Other decriminalization states, including Minnesota and Nevada, have reduced the criminal status of cannabis possession for personal use from a felony to a misdemeanor. Alaska is the only U.S. state that has completely eliminated sanctions for the possession of small amounts of cannabis. This development was a response to a ruling by the Alaskan Supreme Court, which held that the possession of small amounts of cannabis in the home is a civil right that warrants protection under the state's constitutional right to privacy.

In addition to the patchwork of state legislation described in the previous paragraph, some states that do not have recognized decriminalization policies have nonetheless removed sanctions associated with small-scale possession or have enacted legislation that allows for the expungement of cannabis-related offenses. In some of these nondemocratized states, the legal ramifications associated with cannabis are, in effect, less harsh than those found in states that purport decriminalization. Notably, all state decriminalization laws are, as a class, in conflict with federal drug policy, which emphasizes extensive criminalization. Despite this stance, the federal government has decriminalized the ceremonial use of the potently psychoactive, mescaline-rich peyote plant among members of the Native American Church, which suggests that even the relatively arch position of the federal government allows situations in which sanctioning drug use is appropriate.

Canada and Mexico have also seen increased movement toward decriminalization in recent decades. In Canada, many regions report de facto decriminalization, and there is growing support for
formal decriminalization and legalization on the national level. In 2003, the federal government asserted that possession

of small amounts of cannabis should not criminalize the behavior of otherwise law-abiding citizens, and it introduced a bill that would have decriminalized small amounts of cannabis across Canada. Under the proposed legislation, possession of relatively small amounts of cannabis would be punishable with a civil fine, and arresting officers could use discretion in determining whether to arrest persons with larger amounts. Although the issue of national decriminalization in Canada has languished subsequent to political change, efforts toward loosening of restrictions of cannabis use proceed at the regional level. The provincial courts of Ontario have held that criminalizing cannabis possession violates the Canadian constitution, thereby effectively eliminating sanctions for cannabis possession. Federal drug prosecutors for the city of Vancouver have stated that they will not pursue charges for cannabis possession that do not involve aggravating factors.

As is the case with Canada, despite growing support for the liberalization of drug laws, national efforts to decriminalize drug use in Mexico have not yet come to fruition. In 2006, the Mexican Senate passed a bill to decriminalize small amounts of drugs, including cannabis, cocaine, heroin, and hallucinogens, for personal use. However, the bill was not signed by Mexican President Vicente Fox. In short, despite legislative failures to establish a coherent decriminalization policy, policies aimed at reducing or eliminating sanctions related to cannabis use continue to enjoy substantial support in Canada and Mexico, and the adoption of decriminalization policies remains a topic of serious intragovernmental debate.

Other Regions

Few nations outside of Europe and North America have enacted decriminalization policies at the national level, and detailed information regarding the status of regional decriminalization efforts is difficult to obtain for many nations outside of Europe and North America. However, reliable information is available for Australia, where several territories have replaced criminal penalties associated with cannabis possession with civil fines. Under these policies, minor possession and cultivation of cannabis are civil offenses punishable by a small fine. This approach to decriminalization has been criticized for having the paradoxical effect of increasing cannabis-related negative consequences due to a policy of criminal prosecution for nonpayment of cannabis-related fines.

Despite considerable variation across nations in the severity of potential sanctions for drug-related crimes, virtually all "non-Western" nations comply with United Nations policies regarding the criminalization of recreational drugs at the level of official policy. Nonetheless, due to variations in enforcement policies and capacities, many regions, particularly in the developing world, have informal or de facto decriminalization for certain drug-related behaviors.

Decriminalization Outcomes

Decriminalization is a divisive issue, and there is substantial disagreement regarding the sequelae of this diverse array of policies. Indeed, as is the case with many drug policy issues, strongly held opinions on both sides are often based on sociocultural values rather than on reliable estimations of potential consequences. Nonetheless, sound empirical investigations of decriminalization-related outcomes have been conducted. The consequences of decriminalization policies can be estimated across several domains. In the following paragraphs, evidence bearing on the impact of decriminalization with regard to rates of drug use and enforcement costs is examined.
Drug Use

A central issue in the decriminalization debate involves the extent to which decriminalization affects rates of drug use, and opposition to decriminalization policies is often based on the assumption that decreased sanctions will lead to increased use. Contrary to this perspective, there is an apparent consensus in the drug policy literature that decriminalization has little effect on drug use. Specifically, studies from several nations that have compared rates of cannabis use before and after the implementation of cannabis decriminalization policies conclude that changes in use could not be reliably attributed to the adoption of decriminalization policies. Although some studies identified increased use subsequent to decriminalization, these studies noted similar rates of change in comparable jurisdictions that did not enact decriminalization policies. Similarly, self-report-based studies have not identified significant differences between U.S. states with and without decriminalization with regard to adolescent attitudes toward cannabis use.

Several explanations have been proposed to account for this somewhat counterintuitive finding. These include the proposal that decriminalization may have little impact on the availability of cannabis, that citizens are unaware of subtle changes in legal status of the drug, and that decriminalization policies merely formalize already low levels of law enforcement. The relative explanatory power of these proposals is an empirical question. However, the apparent lack of effect of decriminalization is generally consistent with literature on the deterrent effects of changes in sanctions for other forms of prohibited behaviors; that is, alterations in sanctions rarely impact rates of target behaviors.

Although the impact of decriminalization on rates of drug use has been the subject of some investigation, consequences for drug users have been less thoroughly examined. Indeed, given that decriminalization might strongly impact individuals who choose to use drugs, the impact of decriminalization on the quality of life for these stakeholders might be an important consideration in the evaluation of such policies. Further research is needed to clarify this important issue.

Enforcement Costs

A frequently cited benefit of decriminalization is an implied reduction in enforcement costs. This intuitively appealing perspective has found support in hypothetical models designed to estimate potential savings. However, given the plethora of factors that impact real-world law enforcement outcomes and given differences across decriminalization programs, a reliable empirical estimate of actual savings is difficult to determine. Nonetheless, studies that have examined real-world outcomes of decriminalization have generally identified results in the expected direction. That is, decriminalization appears to reduce the drug-related burden on the criminal justice system and thereby reduce costs.

Conclusion

Decriminalization includes a variety of policies designed to reduce legal consequences for certain drug-related behaviors by reducing, replacing, or eliminating sanctions. Decriminalization initiatives are increasingly being implemented across Europe and North America. Most of these initiatives are concerned primarily with reducing sanctions related to cannabis use. Decriminalization initiatives differ in substantial ways, and this heterogeneity complicates generalizations regarding the effects.
Nonetheless, the best evidence suggests that decriminalization has no impact on use and may reduce social costs. Tiffany Walsh, Zach Walsh, and Gregory L. Stuart. See also

Drug Laws, History of

Economic Costs of Alcohol and Drug Abuse

Illicit and Illegal Drugs

Legalization of Drugs

War on Drugs

Further Readings


Gateway Drugs Theory

Initiation of substance use usually occurs in nonrandom but trivial temporal order. Unsurprisingly, the use of any substances is preceded by nonuse, and the first use of illicit drugs is *usually* preceded by consumption of licit substances. The use of "hard" drugs, such as cocaine and heroin, is *usually* preceded by "soft" drugs, such as marijuana. The sequential order becomes even less consistent beyond the initiation of involvement with illicit compounds, to the degree that the illicit drugs other than marijuana, that is, hard drugs, are usually collapsed in one class in research modeling use sequences. Moreover, a substantial proportion of drug users initiate their drug involvement with illicit rather than licit drugs, or use hard drugs before marijuana.

Gateway Theory

The temporal order observations gave rise to the "gateway theory" (also known as "gateway hypothesis" and "stage hypothesis"), which was predated by the similar "stepping-stone" theory that first appeared in the 1930s. The latter assumed that consumption of a "soft" drug, such as marijuana, inexorably sets an individual on a trajectory to addiction to hard drugs. The gateway hypothesis (GH) relaxes the inevitability assumption, but postulates a progressive and hierarchical sequence of "stages," whereby the use of a drug at a "lower" stage (a softer drug) is necessary for progression to a harder drug. This sequence applies only to the use of different drugs rather than different levels or extent of drug involvement (from use to dependence). Originally, as proposed by Denise Kandel in 1975, the "gateway" substances were considered to be beer or wine, which later was changed to marijuana.

Gateway Hypothesis Controversy

The few testable components of the GH include its premise that initiation of use of various drugs is not opportunistic but follows certain stages and pathways, and that the use of a drug at a lower stage is necessary for progression to a higher stage. The GH perspective has been presented as a theoretical antithesis to the concept of nonspecific problem behavior outcomes such as substance use disorders.

The "stages," however, are defined in a circular manner: A stage is said to be reached when a certain drug(s) is used, but that drug is supposed to be used only upon reaching that stage. In effect, the drug is identified with the stage. In other words, there is no process, separate from drug use per se, which is hypothesized to underlie the supposed developmental staging indicated by drug milestones. Moreover, the notion of "stage" itself is redefined from its common denotation, such that the later stages are assumed to be reachable before the earlier ones, apparently to accommodate the need in relating the GH to the conventional biological developmental framework. Any explicit causal proposition for the observed sequence is avoided. The numerous implicit statements of causation from the proponents of GH merely restate the observation of a sequential order. Indeed, it is hard to discern a falsifiable element in the GH beyond that observation, as is characteristic of inductive theories. The vagueness of a gateway drug itself is admitted by the originator of the GH. Virtually every proposition of the GH is qualified by a disclaimer, effectively engulfing and neutralizing possible arguments to the contrary. All possible deviations from the hypothesized
"basic" sequence are automatically relegated to the category of error, or random, or nonsystematic patterns. Because the "stage," the main component of the gateway hypothesis, is defined by the drugs used at this stage, it is not surprising that the "stage" sequence parallels ranking of the prevalences of use of respective drugs.

It is important, nevertheless, to submit the GH to analysis, because its statement of the sequential order has had a significant influence on policy formation, intervention, and research. The latter, whose purpose is to inform both intervention and policy, may be hindered or misdirected if a concept lacking substance, validity, and utility is accorded prominence. In turn, the targets for policy and intervention may be shifted or insufficiently focused to produce an optimal impact.

The arguments against the substance of the GH, however difficult it is to define, can start from its logic. In addition to the faulty circularity of the definition of "stages," the GH appears to fall into the "false cause" category of logical fallacies, including the ordinary post hoc ergo propter hoc ("after that, hence because of that") fallacy. Although the GH proponents avoid statements of causation, the claim of necessity to reach a "lower stage" before progressing to a higher one pertains to causality, developmental sequence, or both. To illustrate the problem with this claim, consider growth in stature. To grow to the height of 6.1 feet, one needs to first reach the 6.0-foot mark and cannot skip it. It is not necessary, however, to hypothesize any causation or, as observed in developmental staging, any difference between the mechanisms involved in reaching these two heights (one of the postulates of the GH for drug use sequence). Nor is it likely that these two points will be called "stages." Nevertheless, these consecutive height values better qualify to be called stages than the "stages" of drug use because (a) they reflect a true developmental process and (b) there are no exclusions, stage reversals, and stage skipping, so common for time-related patterns of drug use. "Stage," however, usually implies a distinct step in a developmental process (e.g., embryonic stages), which indeed involves activation and deactivation of various mechanisms. It is well known that a considerable proportion of drug users and addicts initiate their substance use with illicit and hard drugs, instead of proceeding from licit to illicit or from soft to hard drugs. Stage skipping and stage reversals in the consecutive use of various drugs illustrate the lack of necessity for the "stages" that are designated to be "lower" and make the "stage" designation dubious.

The conclusion of association between the "stages" in the sequence—necessary to unite them into a meaningful process—is made from the fact that cocaine and heroin users, more frequently than not, have used marijuana before. Even a larger number, however, have drunk water before using any drugs, from which hardly anybody would attempt to derive a meaningful sequence. It is thus not surprising that, as calculations show, when the frequency of marijuana use in the population is taken into account, the actual association between marijuana and cocaine use becomes negligible—and this is assuming that all cocaine users have used marijuana. It is even lower for heroin. The high correlations encountered in the literature and establishing the association between marijuana use and other drug use are artifactual because they are estimated among hard drug users, without taking into account the large population of those who try or even habitually use marijuana but never transition to harder drugs. Marijuana is likely to be the first illicit drug offered to the noninitiated person not only because it is likelier to be available from the peers but also because it is likelier to be accepted than, for instance, intravenous heroin. The route of administration is uncomplicated and is as familiar, and thus perceivably innocuous, as tobacco smoking, whose legality is limited only by age.

The alternative explanation of the frequent order of drug use initiation is the common liability model, subsuming, to a large degree, the concept of "problem behavior." The high comorbidity of substance use disorder (SUD) as well as familial aggregation of these disorders, which are heterogeneous in substances used and in symptoms, are parsimoniously explained within the framework of common liability to SUD, a complex (multifactorial) latent trait underlying the risk for SUD. The liability concept was introduced to human genetics for disorders that do not follow Mendelian (single-gene) patterns of inheritance but
nevertheless have nonrandom familial distribution. In contrast to Mendelian traits, where risk varies in relation to the genotypes for a single gene, variation in the risk for multifactorial traits depends on multiple genetic and nongenetic factors. The liability pheno-type (manifest as risk for and severity of the disorder) is determined by all factors, genetic and nongenetic, that influence the likelihood of the development of the disorder. Significant genetic correlations (correlation between genetic components of phenotypic variance), cotransmission, or both, have been shown between the liabilities to alcohol and drug use disorders, substance use and smoking, as well as nicotine and alcohol dependence. Liabilities to use or abuse of different categories of illicit drugs (marijuana, stimulants, sedatives, heroin, and psychedelics) have been shown to share most of their variance and comprise a group genetically somewhat distinct from the risk to abuse licit substances. The genetic factors are mostly nonspecific to drugs.

At the neurochemical, neuroanatomical, and physiological levels, these commonalities involve the mechanisms of drug reward and dependence, known to be shared in common for various drug classes. These mechanisms are also involved in natural reward and, at the psychological level, are reflected in behavioral or affect dysregulation, frequently preceding drug involvement. No relationship is detected between preferred substance (heroin, cocaine, alcohol) and personality, whereas the extent of polysubstance involvement correlates with an increase in dysregulation, consistent with commonality in psychological mechanisms of liability as well as with the development of liability phenotype. Liability to substance use disorders is a dynamic trait; its development unfolds from the moment of conception and is influenced by numerous factors directing the trajectory to or from substance use and, ultimately, the diagnostic threshold. From the liability concept perspective, there appears to be no more meaning and causation in the temporal sequence of drug use initiation than in the opportunistic order in which dinner is served at a restaurant: first hors d'oeuvres, then soup, and so on, any of which can be skipped or, conceivably, changed in order. In fact, appetizers, intended exactly to arouse appetite, may have more to do with causation than any of the "gateway" drugs for the continuation of the respective sequences. Generally, however, regardless of appetite changes during a meal—or, by analogy, of whether sensitization (a possible increase of sensitivity to the effect of a drug due to the action of another drug) plays any role in drug use progression—it is the basic need for food that causes food consumption rather than any element of the dinner sequence. This basic need is analogous to the reasons why people use psychoactive substances in general and differ from each other in the risk for using and abusing them. These reasons and differences have been shown to involve all substances, particularly illicit ones, regardless of their class and pharmacological effect. These reasons are likely to be related to behavioral deviancy predating drug abuse, generally described as behavioral dysregulation or disinhibition, manifesting in problem behavior. Thus, the problem behavior concept substantially overlaps with the notion of common liability to SUD, particularly in liability mechanisms preceding drug involvement, as well as its changes—the domain pertaining to the focus of the GH.

Proportions of those who used drugs among those who had the opportunity are strikingly similar for marijuana and the hard drugs, consistent with opportunistic use that is opposed by the GH. The GH would predict that augmenting availability of a "gateway drug" such as cannabis will lead to an increase in cocaine and heroin use. This, however, has not happened in countries where marijuana use is de facto legalized, which is fully consistent with the common liability model, interpreting the predominant sequential order as opportunistic. Like other inductive theories, however, the GH renders arguments against it as ever-incomplete as arguments in its support. For instance, the finding of no differences between the individuals following typical and nontypical sequences on a large number of characteristics can be countered by the "white swans" argument: All swans could be assumed to be white until the black ones were discovered. The stage-specificity of risk factors as a possible argument for the validity of the GH is not testable, because of the circularity of the stage definition. Because different drugs denote different stages, specificity, along with commonality, is expected, because of the existence of drug-specific mechanisms. Nevertheless, an increasingly large body of data in violation of the major postulate of the GH, namely, that of a nonopportunistic order of drug use initiation, seriously compromises the GH's validity. Clearly, what defines the
"stages" (licit, marijuana, other illicit drugs) is not their pharmacological properties or differences in the individual's response.

to them but the obvious socioeconomic boundaries determined by the combined public perception of the "hardness" of drugs (with consequent legal barriers needed to be overcome in order to use a drug) and their price—both subject to change. If the drug use initiation is opportunistic, the likeliest among the possible sequences of drug use initiation are those that correspond to the gradation in the prevalences of drug use. Indeed, taking into account that marijuana is commonly the first illicit drug on offer, common liability has been shown to be more than sufficient to explain the associations and the ordering between marijuana and other illicit drug use. Even stronger associations would still be fully consistent with the common liability model. The high comorbidity of drug addictions is grounded in the evolutionarily very old and conserved system underlying reward and incentive motivation. It is largely common to various drugs exactly because this common system determines their addictive property.

Conclusion

The GH has exerted considerable influence on the field of substance abuse, affecting research, intervention, and policy. In research, it has been presented as antithetical to the "problem behavior" perspective. Research concerned with corollaries from the GH during the 30 years since it was advanced has commanded substantial resources and has been a subject of numerous publications. To a large degree, this attention is explained by the high practical value that has been ascribed to the attractively simple proposition of a sequential order in drug use initiation, which is the essence of the GH. Nevertheless, the GH remains controversial. The hypothesis provides few testable assumptions, which are not supported by empirical evidence. The causal implications of the GH are unsubstantiated and may be based on a logically faulty premise. The temporal order and transitions in drug use initiation, as well as their inconsistency that is ignored by the GH, can parsimoniously be accounted for by an alternative explanation: the common liability model. Importantly, that model also explains the relationships between the liabilities to SUDs, to which the GH, limited to drug use initiation, does not extend.

Preventing drug use by delaying first use of any drug as long as possible, as would follow from the GH, misdirects attention from causes to the effects, manifestations of factors determining the liability phenotype. As a predictor, alcohol, tobacco, or marijuana use may have good sensitivity, but its specificity and positive predictive value are low.

The GH appears redundant juxtaposed with the parsimonious and empirically proven concept of common liability of the disorder. Considering the abundant exclusions from, and the triviality of, the typical substance use initiation sequence, its utility is uncertain. Taking into account the danger that the typical sequence's presentation as a theory may be (and has been) erroneously interpreted in causal terms, it may be harmful for both research and intervention.

Michael Vanyukov and Ralph Tarter See also
Experimental Substance Use

Genetic Aspects of Addiction

Neurobiology of Addiction

Further Readings

Falconer, D. S. The inheritance of liability to certain diseases, estimated from the incidence among relatives. *Annals of Human Genetics* 29 (1965) 51–76


Gateway Drugs Theory
Legalization of Drugs

Public opinion about drug use and drug abuse is difficult to ascertain. It would be completely impossible to live in an entirely drug-free society in that drugs help alleviate pain and misery, correct organic and social dysfunction, and treat disease. And yet, drug use and abuse can serve to create some of the very conditions that drug therapy seeks to control. Drugs create disease, damage organs and tissue, engender social and psychological problems, and create physical and interpersonal pain. Furthermore, drug use and abuse creates, at the social level, crime and criminal activities that the non-drug-abusing members of society deem unacceptable. The use of many drugs represents a crime, irrespective of the individual or social harms done by the drug or by the person under the influence of the drug. So why then is there such considerable and constant interest in the idea of drug legalization?

Historically, the topic of drug criminalization and drug legalization has emerged several times. Usually, the discussion about criminalization occurs when there is something else happening in the society that is related to drug use and the public believes (perhaps wrongfully) that criminalization will solve the problem. Sometimes the criminalization helps, sometimes there is no noticeable or immediate effect, and sometimes the criminalization creates more problems; discussion then ensues regarding undoing the criminalization. Usually, this discussion centers either on a cost-benefit analysis of the laws or on the morality of drug use and the idea that it should remain illegal, regardless of the costs.

History

In 1914, the United States sought to control what was perceived as a growing threat to society by limiting access to cocaine, allowing it to only be obtained through a prescription offered by a health professional. In 1919, this act, known as the Harrison Act, was amended to make all distribution of cocaine illegal. In the same period, alcohol was outlawed through the Volstead Act, a prohibition that lasted until 1933.

Supporters of drug legalization cite multiple examples of miscarriages of justice and ask pointed questions in an attempt to show the illogical nature of drug laws and drug law enforcement. For instance, why was alcohol banned and not other addictive substances like tobacco? Why do similar substances, for example, powdered and crack cocaine, carry different punishments? These advocates of drug legalization are quick to point out that crime rates dropped dramatically after the approval of the 21st Amendment, which repealed the Volstead Act in 1933.

Current Issues

Even the most ardent supporters of drug legalization do not support the total and complete removal of all controls on drug use and possession. Juveniles and others who lack mature reasoning skills must be protected, but limited drug legalization could yield social and economic benefits far beyond the risks and costs to society. There is a great deal of drug use in society, and the majority of these users are adults who use these drugs for purely recreational purposes. This use does not generate
thefts or robberies, it does not result in children being abused or neglected, and it rarely serves the interest of the justice system. In the 1970s, recreational drug use was treated with benign neglect by the justice system, and the majority of society had no problem with this unofficial policy.

Today, however, the mere use of drugs creates the threat of adjudication and incarceration even when there is no other harm associated with the behavior because drug use is illegal. If drug use was legal, the use would cease to be a social or legal problem.

Not all drug use is inconsequential. It would be unreasonable to assume that drug use does not generate crime beyond the simple purchase, possession, and use of the drug. Drug use does lead to crime in many cases. So how can the supporters of drug legalization advocate making them legal when the use of the drug is often either the cause or the result of crime? These advocates point out that drugs are a simple commodity, governed by the same market forces as legal commodities. It stands to reason, therefore, that the cost of the drug is a function of the availability, the demand, and the cost of production, which includes the growing or synthesizing of the substance, the processing and packaging of the drug into manageable and marketable units, and the distribution to the end user. All of these stages, due to the illegal nature of the substance, carry risk of detection and apprehension. This risk (and the associated losses caused by detection and apprehension) must be calculated into the cost of production, thereby increasing the cost of the product to the end consumer. As the risks of detection and apprehension increase, production and sales must increase to offset losses caused by confiscation, as will the legal costs associated with defense. In short, increases in enforcement lead to more production and to increased costs to end users. Since a certain proportion of the end users support their drug use through illegal activities, increases in enforcement that result in corresponding increases in both risk and price lead directly to increases in the numbers of crimes that are used to generate the money necessary to purchase the drugs. At the same time, these increases in enforcement add persons to the justice system who have been apprehended for the production, possession, use, and sales of the drug.

Arguments in Favor of Legalization

Legalization advocates argue that the legalization and control of select drugs would simultaneously drop the cost of the drugs to the end user while improving the quality and safety of the product. Add to this the reduced number of persons processed through the justice system and the diminished dollar value of drug-related crimes and you have an equation with few negatives and multiple advantages. The costs associated with policing, apprehending, adjudicating, and incarcerating drug and drug-related crime would greatly decrease, allowing increased spending in areas neglected since the onset of the War on Drugs.

Positions such as this argument are usually considered the domain of libertarians and those who oppose laws in many forms, not just those associated with drugs. It is, however, important to note that the position that supports limiting the laws that criminalize drug use and possession has proponents on both sides of the political spectrum. In 1999, then-governor of New Mexico, Gary Johnson (a Republican), argued that the War on Drugs had been a multibillion dollar failure and that he supported drug legalization for many reasons. In response to Johnson's statements, Barry McCaffrey, the director of the Office of National Drug Control Policy, called Governor Johnson's statements and his position on drug legalization irresponsible.

Arguments in favor of drug legalization have almost always focused on the potential financial savings to society, as well as on the increased funding available for other worthy programs if less money was being spent on a War on Drugs that cannot be won. Although some opponents of legalization acknowledge that there may be financial savings associated with legalization, the risk of
increased social costs and the associated social disintegration make the option of legalization less socially and economically viable.

Arguments Against Legalization

In May 2003, the Drug Enforcement Administration (DEA) released a report titled *Speaking Out Against Drug Legalization*, which focused on the dangers of legalization. Rather than disputing the points made by the legalization advocates, the DEA argued that the legalization debate has become more intense due to drug legalization trends in Europe. The DEA contends, however, that the social situation in Europe is distinctly different from that of the United States, and policies that work there would likely be disastrous in the United States.

The DEA report contends that the War on Drugs is working. Drug use is decreasing and approximately 95% of all Americans do not use illegal drugs of any type. Treatment efforts and prevention are also working, and the progress made in the treatment and prevention areas would be undone by legalization. The justice system is often the primary conduit that gets users into treatment programs. And, although not all treatment is successful the first time it is attempted, eventually many of these users stop using drugs due to aging and the cumulative effects of treatment programming. The leverage provided by a court order or referral would disappear if drugs were legalized, and a critical element of deterrence would also vanish, making increased use of now-illegal drugs a virtual certainty.

Those who support legalization cite how the cost of drug law enforcement would diminish substantially if the drug laws were repealed, but those who support the retention of these laws cite reports that indicate the small overall impact this would have on the national budget. The DEA report notes that the entire budget for drug control ($12.9 billion in 2008) only constitutes a minor portion of the U.S. budget, and the social and financial costs of drug use and addiction far outweigh the meager savings associated with the repeal of these laws. To support the idea that the legalization of drugs would lead to more addiction and increases in related social costs, the DEA provides the experience of Alaska as an example. In the 1970s, Alaska experimented with the legalization of marijuana, and within a short period of time, the youth in Alaska were using marijuana at twice the rate of youth in the lower 48 states. Alaskans decided in 1990 that the experiment had failed, and they subsequently voted to recriminalize marijuana in 1990. In the Netherlands, a similar situation occurred when heroin use and addiction tripled within a couple years of the legalization of marijuana. Although marijuana legalization may have kept some persons out of the justice system, the accessibility and lack of deterrence may have created more marijuana users and subsequently, more heroin users and addicts. By increasing access to a low-level drug, critics believe it may have sent a message to the citizens that drug use in general, regardless of the level, was acceptable.

Finally, those who support legalization often cite the medical uses of drugs such as marijuana. The criminalization of these drugs makes it much harder for persons with chronic health problems to get relief. Legal medications may not be as effective, and they may cost the consumer much more than illegal drugs would. According to the DEA, there are options for these persons, and these options are both safer than street-grade drugs and are legal. Marinol, which contains the active ingredient in marijuana (THC), is claimed to have the same effect as smoking marijuana, is legal, and does not cause the damage to the lungs that inhaling marijuana smoke can cause.
Conclusion

As stated earlier, discussing drug legalization places at odds the areas of morality and economic logic. The discussion is not a true debate because the sides rarely even consider the same issues to be central to the argument. Those in favor of legalization discuss the savings to the justice system and the economic costs of locking up relatively nondangerous offenders while opponents of legalization discuss the risk to society caused by relaxing drug laws and the possible negative consequences of the removal of legal constraints on drug use. The one area that the two sides can debate is on the War on Drugs. Each side, however, argues that the War on Drugs is the best reason to support their side. Those who support retaining the current drug laws believe that the War on Drugs is going well (as evidenced by the diminishing numbers of users), and without drug laws, many former drug users would have never received the help necessary to stop using. Opponents of drug laws maintain that the War on Drugs has been a monumental waste of time and money and repealing the laws would allow spending in areas that would yield much greater benefits to all of society. Even though the two sides are discussing the same basic issue, they each define success on the War on Drugs differently, and consequently, they disagree on the success of the war and the value of the laws that make the War on Drugs necessary. In short, there is no clear answer to the drug legalization question, but strong evidence exists in support of each side of the discussion.

Matthew Leone

See also

- Decriminalization
- Harm Reduction Psychotherapy
- Harm Reduction, Public Health
- National Drug Control Strategy
- Public Policy, Drugs

Further Readings

Marijuana

Marijuana is the common way to refer to a class of drugs called cannabinols. The cannabinols include marijuana (grass, pot, weed, joint, reefer, dube), hashish, Charas, Bhang, ganja, and sinsemilla. The active ingredient is delta-9-tetrahydrocannabinol (THC). Hashish and Charas have a THC content of 7% to 14%; ganja and sinsemilla, 4% to 7%; and bhang and marijuana, 2% to 5%. However, modern growing techniques have increased the THC content of marijuana sold illicitly. For simplicity, the various forms of cannabinols will be referred to as marijuana.

The earliest references to the drug date back to 2700 Be. In the 1700s, the hemp plant (cannabis sativa) was grown in the colonies for its fiber, which was used in rope. Beginning in 1926, states began to outlaw the use of marijuana since it was claimed to cause criminal behavior and violence. Marijuana use became popular with mainstream young people in the 1960s. Some states have basically decriminalized possession of small amounts of marijuana, although according to the federal government, it remains a Schedule I drug, meaning that marijuana has no approved medical uses and has a high abuse potential.

Prevalence

Marijuana is the most widely used illegal drug. The result of the 2006 National Survey on Drug Use and Health showed that nearly 97.8 million Americans reported using marijuana sometime in their life, 25 million had used marijuana in the past year, and more than 14.8 million had used this drug in the past month. The number of past-month users is nearly 7 times the number of past-month users of cocaine, the next most widely used illegal drug and more than double the number of past-month nonmedical users of prescription drugs. Among young people, ages 12 to 17, 6.7% reported using marijuana in the past month, and 16% of young adults ages 18 to 25 used marijuana in the past month. Over 2 million people used marijuana for the first time in 2006.

Major Effects

Acute Physical and Psychological Effects

Marijuana is usually smoked in cigarette form or in pipes. It can also be ingested, normally by baking it in brownies or cookies. Marijuana users experience euphoria; enhancement of taste, touch, and smell; relaxation; increased appetite; altered time sense; and impaired immediate recall. An enhanced perception of the humor of situations or events may occur. The physiological effects of marijuana include increase in pulse rate and blood pressure, dilation of blood vessels in the cornea (which produces bloodshot eyes), and dry mouth. Motor skills and reaction time are slowed.

Marijuana intoxication has an adverse effect on attention span, short-term memory, and psychomotor performance. Anxiety and panic attacks can occur, primarily in new users who are not familiar with marijuana's effects. At very high doses, some people experience delusions and hallucinations. There are no cases of fatal marijuana poisoning, and humans are unlikely to be able to ingest a fatal dose. The effect of marijuana intoxication impairs motor and cognitive
abilities necessary to safely drive a car or operate machinery. The extent to which marijuana is involved in auto accidents is unclear. Many motorists intoxicated with marijuana drive more slowly and carefully and take fewer risks. However, there is an increased risk of accidents after using marijuana, but marijuana alone does not appear to contribute a great deal to accidents. Marijuana in combination with alcohol does.

**Physical Effects of Chronic Use**

Marijuana smoke contains carcinogens. However, because of nondefinitive or conflicting results, additional research on the association between smoking marijuana and certain cancers should be conducted. There is no evidence that the rate of infectious diseases is increased among heavy marijuana users. However, with very high doses of marijuana, animal studies have shown immune system impairment, reduced resistance to infection, and compromises in the immune defense system in the lungs. Studies of HIV patients who use marijuana have not produced evidence of an accelerated progression to AIDS. The use of marijuana during pregnancy is associated with small birthweight but not with an increased risk of birth defects. Similar but smaller, behavioral, and developmental effects resulting from maternal tobacco use have been seen in studies of infants prenatally exposed to marijuana. Animal studies have demonstrated disruption in the reproduction system from chronic administration of THC. However, no definitive research has been conducted on the impact of heavy marijuana use on the reproductive systems of humans. The changes in heart rate and blood pressure from marijuana use are not likely to have an adverse impact on healthy adults but could be harmful to those with hypertension, at high risk for strokes, or with clogged heart arteries. Because marijuana smoke contains many of the same carcinogens found in tobacco smoke, it is likely that marijuana smoking increases the risk of respiratory cancers, especially if used in combination with tobacco. The regular use of smoked marijuana impairs the functioning of the airways and can cause chronic bronchitis. There is no evidence of any adverse effect of marijuana on the liver or gastrointestinal system.

**Psychological Effects of Chronic Use**

In the late 1960s, an amotivational syndrome was described in which young marijuana users were seen as apathetic, withdrawn, lethargic and unmotivated. However, there is no evidence of a unique syndrome with these symptoms that is attributable to marijuana use. These symptoms are more likely the result of marijuana dependence. Clearly, heavy marijuana use can lead to dependence on the drug characterized by a combination of social, legal, financial, family, educational, and occupational problems; withdrawal symptoms when drug use is discontinued; and difficulty in controlling the use of marijuana in spite of the intention to do so. The rate of abuse and dependence problems from marijuana is lower than that of alcohol, and more people with marijuana problems are able to discontinue their use without treatment than is found with other addicting substances. Daily long-term use of marijuana may adversely impact memory, attention, and the integration of complex information in subtle ways. However, there does not seem to be any severe impairment of cognitive functioning. There is still some uncertainty regarding whether all the impairments are reversible after a long period of abstinence.

Although there is a relationship between heavy marijuana use and mental health problems, the nature of this relationship is open to interpretation. Young people who use marijuana are at high risk for mental health problems. Some of this is explained by the fact that these young people were at high risk for mental health problems before they began to use marijuana. In addition, young people who begin using marijuana at a young age are more likely to affiliate with delinquent and/or drug-using peers, which increases their risk for a variety of problems. Finally, it should be noted that the early first use of tobacco and alcohol is also associated with later mental health problems. Therefore, the likely mediating variables that explain the association between marijuana and mental health
problems involve the predisposing characteristics of the users and the lifestyle associated with illegal drug use.

There is evidence that marijuana can precipitate psychosis in people who are vulnerable to developing psychotic disorders. In other words, some people will develop schizophrenia or another psychotic disorder if the proper environmental conditions are present (e.g., trauma). The heavy use of marijuana may be one of those environmental factors. In spite of the implication that marijuana can cause schizophrenia, this does not seem likely. When marijuana use has increased among adults, the incidence of schizophrenia has been stable or decreased.

Similarly, there is an association between adolescent marijuana use and noncompletion of high school, involvement in drug-related crime, early pregnancy, and divorce. Again, the characteristics of the adolescent marijuana user seem to be the factors that explain these associations. However, there is little doubt that the early use of marijuana is among the risk factors that are associated with a variety of adolescent problems.

Medical Uses of Marijuana

In 1999, the Institute of Medicine (IOM) prepared a report at the request of the federal government on the scientific evidence regarding medical uses for marijuana. The conclusion was that there was scientific evidence for the potential therapeutic value of THC for pain relief, nausea and vomiting control, and appetite stimulation. However, the IOM report also indicated that smoking marijuana was an imprecise method to deliver THC and produced harmful substances through smoking. The report also discussed the psychological effects of marijuana, such as anxiety reduction, sedation, and euphoria. It was determined that these psychological effects can influence the therapeutic effects in potentially beneficial or harmful ways. For example, some older patients reported that the psychological effects were disturbing. For patients with AIDS wasting syndrome, the combination of appetite stimulation with the psychological effects of anxiety reduction, sedation, and euphoria could be beneficial.

The IOM report also examined the risks associated with the medical use of marijuana. With the exception of the harms associated with smoking, the detrimental effects of marijuana were seen as being within the range that is tolerated for other medications. The acute effects included diminished psychomotor performance, which could impact driving or the operation of dangerous equipment. A small number of marijuana users experienced unpleasant feelings from the drug. The acute effects on the immune system could not be firmly established but if such effects exist, were not severe enough to rule out the use of marijuana for medicinal purposes. With regard to chronic effects, the conclusion was that marijuana smoke is associated with increased risk of cancer, lung damage, and poor pregnancy outcomes. There was no convincing evidence that marijuana smoke does or does not cause respiratory cancer.

There are claims that marijuana is also beneficial in the control of muscle spasticity and in reducing intraocular pressure from glaucoma. The IOM report did not find compelling evidence to support or refute this claim with regard to muscle spasticity and concluded that marijuana was not effective treatment for glaucoma.

Treatment Admissions and Emergency Room Visits

According to information from the federal government, admissions to treatment in which the patient reported marijuana was the primary substance of abuse more than doubled from 1993 to 2003. In 1993, 7% of all admissions mentioned marijuana as the primary drug of choice, while 16% reported
this in 2003. However, most of this increase was driven by referrals from the criminal justice system. In 1993, 48% of the marijuana treatment admissions were referred from the criminal justice system and 57% in 2003. Therefore, it is not possible to tell if the increase in treatment admissions is due to law enforcement changes (i.e., drug courts) or actual increases in marijuana dependence.

According to the Drug Abuse Warning Network, there were 627,923 emergency room visits related to drugs in the last half of 2003, and 12.7% of these visits included marijuana as a drug that either induced or related to the emergency room visit. In 4.5% of these cases, the emergency room visit involved a suicide attempt, 10.9% involved a desire for detoxification, and nearly all of the rest (84%) were categorized as other. In comparison, cocaine accounted for 20.1% of the drug-related emergency room visits, heroin was involved in 7.6%, and methamphetamine was mentioned in 4% of the cases. Therefore, marijuana was mentioned more often than any other illegal drug except cocaine.

**Gateway Theory**

Does marijuana use lead to other drug use? This idea is frequently referred to as the gateway theory. That is, the use of marijuana is a gateway to the use of other drugs. There is no evidence that there is something inherent in marijuana that causes a person to use other drugs. Although there is no disputing the fact that marijuana users are more likely than nonmarijuana users to use other drugs and that the earlier the age of first use of marijuana, the more likely the individual is to use other drugs, the relationship between these facts and the gateway theory is controversial. There is no evidence that marijuana has some pharmacological property that would cause a user to crave other drugs. The most likely explanations for the relationships between marijuana and other drug use involve the characteristics of marijuana users and peer and environmental influences. Those individuals who use marijuana at an early age and/or use marijuana heavily may have genetic, personality, and attitudinal characteristics that predispose them to use mind-altering substances. Since marijuana is the most widely available illegal drug and is perceived as the least harmful illegal drug, it makes sense that this drug would be used first. The fact that tobacco and alcohol use almost always precedes marijuana use is further evidence that the most widely available substance will be used first. Furthermore, those young people who use marijuana are affiliating with peers who also use marijuana, who are accepting of illegal drug use, who generally support the experimentation of other drugs, and who have some knowledge of how to secure illegal drugs. These generalizations do not always fit, since there are certainly peer groups who use marijuana but who disapprove of the use of other drugs, and not all marijuana users progress to the use of other drugs. In fact, most do not. However, it is not difficult to conceptualize a 13-year-old who begins to use marijuana as associating with a peer group that is accepting of drug use in general, while an 18-year-old who first uses marijuana may be involved in a peer group whose illegal drug use is limited to marijuana. The 13-year-old initiate is much more likely to be rebellious, risk-taking, and unconventional than the 18-year-old initiate. This difference would explain the relationship between age of first use of marijuana and the use of other drugs.

**Conclusion**

Marijuana is the most widely used illegal drug. Although it is classified as a Schedule I drug by the federal government, marijuana is clearly not as dangerous acutely or chronically as drugs that have lower classifications. However, marijuana, like all mind-altering substances, is a drug that has damaging effects acutely and chronically and can result in dependence among heavy users. The
available scientific evidence is that there is some likelihood that marijuana has medical uses, particularly in the alleviation of nausea, pain relief, and in appetite stimulation in people with serious, life-threatening medical conditions.

Gary L. Fisher See also

Amotivational Syndrome

Cannabis Youth Treatment Study

Decriminalization

Gateway Drugs Theory

Legalization of Drugs

Public Policy, Drugs

Further Readings


Medical Consequences

The National Survey on Drug Use and Health estimated that in 2006, 20.4 million Americans ages 12 years or older used an illicit drug in the month prior to the survey. About 7 million could be classified with a substance abuse or dependence disorder in the past year. Substance abuse can be defined as a harmful pattern of drug use that results in repeated adverse consequences, such as the failure to meet social obligations or encountering legal problems. The consequences of substance abuse can and often do lead to serious medical problems for not only the individual who uses drugs but also for the society at large. Some of the negative effects can occur after using a huge quantity of drugs or after using for an extended period; while in other cases, a negative effect may occur immediately after just one use. Nevertheless, research has shown that abusing drugs can cause damage to the brain and to all other organ systems as a result of changes brought about by the direct and indirect effects of drug use.

Neurological Effects

All drugs manipulate the brain in a way that results in the excessive release of chemicals, such as dopamine and serotonin, which can produce a euphoric effect within the user. But as mentioned before, most of the effects of drug use are not positive. Over time, long-term substance abuse can change the brain structure in a way that eventually leads to dependence or addiction. In most instances of substance dependence, the user needs to continue using a particular substance in order to avoid experiencing withdrawal symptoms. The symptoms of withdrawal depend on the substance but can include tachycardia (increased heart rate), hypertension (high blood pressure), nausea, sweating, tremors, seizures, and visual hallucinations. In rare instances involving certain types of substances, withdrawal can lead to death. Addiction is a brain disease characterized by uncontrollable, compulsive drug craving, seeking, and use, even in the face of negative health and social consequences. So individuals addicted to drugs are not only physically dependent but also psychologically dependent as well. Once addiction sets in, the likelihood of developing some kind of medical ailment is increased. In addition to the effects listed above, changes in the brain chemistry can lead to problems with memory, attention, and more serious psychological problems such as paranoia, depression, aggression, and hallucinations. The abuse of drugs can also cause widespread brain damage, seizures, and strokes.

Cardiovascular Effects

The abuse of drugs can have a damaging effect on the cardiovascular system. Some drugs, such as cocaine, cause an increase in blood pressure and heart rate, which increases the risk of cardiac arrest and heart failure. The use of drugs can also lead to disturbances in heart rhythm. The use of inhalants has been shown to induce irregular and rapid heart rhythms, which can lead to heart failure and death within minutes of sniffing. The chronic act of injecting heroin has been known to cause bacterial infections of the blood vessels and heart valves and can lead to scarred and/or collapsed veins.

Respiratory Effects

The lungs transport oxygen from the atmosphere into the bloodstream and carbon dioxide from the bloodstream into the atmosphere. The abuse of drugs can disrupt this process in many ways. Some
drugs can cause an increase in breathing that makes the lungs work harder, while others can cause breathing to slow down or can reduce the capability of the lungs to absorb oxygen. Long-term use of some drugs can also have a corrosive effect on the lung tissue, which can lead to a variety of respiratory problems such as asthma, bronchitis, and emphysema.

**Gastrointestinal Effects**

Using drugs can have an adverse effect on the gastrointestinal system. Some of the short-term effects of drug use on the gastrointestinal system include nausea, vomiting, severe stomach cramps, and pains. Chronic abuse of certain drugs can lead to stomach ulcers and even cancers of the gastrointestinal system.

**Kidney Damage**

The kidneys are responsible for cleansing the blood by filtering it of waste and toxins. Drug abuse can often lead to high levels of toxins and waste being introduced into the bloodstream. This waste can cause the kidneys to become overworked and poisoned as these organs try to rid the bloodstream of these extreme amounts of toxins and waste. This along with increases in body temperature and muscle breakdown can cause kidney damage or even failure.

**Liver Damage**

The liver plays a huge role in just about every process that takes place in the body and is essential in keeping the body running properly. It removes or neutralizes poisons, germs, and bacteria from the blood. It also produces bile to help the body to absorb nutrients digested by the stomach. Chronic use of some drugs, such as inhalants and steroids, can cause severe damage to the liver, which can lead to the breakdown of normal bodily functions and complete liver failure.

**Musculoskeletal Effects**

The use of some drugs such as steroids can signal the body to stop growing or developing earlier than they would have. This can lead to stunted growth or permanent sexual immaturity. Other drugs can cause violent muscle spasms or muscle weakness. PCP is known to cause muscle contractions, which, when severe, can result in kidney damage or failure as a consequence of muscle cells breaking down.

**Hormonal Effects**

Drugs such as steroids are known to have a damaging effect on normal hormone levels, causing both reversible and irreversible changes. In men, these changes can include breast formation, testicular atrophy, infertility, and male-patterned baldness. In women the abuse of steroids causes masculinization. So, females may experience a deepening of the voice, facial hair growth, a decrease in breast size and body fat, enlargement of the clitoris, and male-pattern baldness.
Indirect Effects

As shown in the previous sections, drugs of abuse can directly cause many medical problems. They can also indirectly impact the health of the user as result of the circumstances and behaviors associated with drug abuse. Different routes of administration can produce different adverse effects on the body. For instance, snorting cocaine can lead to nosebleeds, problems with swallowing, hoarseness, and an overall irritation of the nasal septum, which can lead to a chronically inflamed, runny nose.

Injecting drugs can cause blood clots, scarred and/or collapsed veins, and severe skin infections. In addition to these effects, the sharing of injection equipment or fluids increases the risk of the user acquiring some kind of infectious disease such as hepatitis (HCV) and HIV. In fact, research has shown that injection drug users (IDU) represent the highest risk group for acquiring HCV infection. It is estimated that almost 80% of new HCV infections occurring in the United States are among IDUs.

The abuse of some drugs can repress inhibitions and lead people to take risks while under the influence, such as engaging in impulsive sexual activity. This activity of course, increases the risk of contracting HIV or some other sexually transmitted disease. Drugs can also lead people to engage in other unsafe behaviors such as driving under influence or getting into a fight, which can result in injuries that require medical care.

Drug abuse can complicate the treatment of other illnesses or injuries. Research has shown that a large proportion of chronic drug abusers do not comply with their medication regimens and many do not seek proper medical care. Also, some illicit drugs are known to negatively interact with medications used for treating diseases. So, if a user continues to use an illicit drug while taking medication for a medical condition, this can cause the medication to become less effective as well as cause other adverse effects.

Societal Effects

Many of the consequences of drug abuse can have a negative impact on the health of the non-drug-abusing public. Not only are drug abusers more likely to contract HIV and other sexually transmitted diseases due to engaging in high-risk behaviors such as having unprotected sex, they also risk passing these diseases onto their sexual partners. In addition to this, many drug abusers are at greater risk for contracting other diseases such as tuberculosis (TB) if their immune system has been compromised due to various factors such as long-term drug use, inadequate nutrition, or HIV/AIDS. Furthermore,

...even if they do seek medical attention, many are not compliant with their treatment regimes and continue to compromise their health by using alcohol and other drugs. This has led to the development of a multidrug resistant strain (MDR) of TB that does not respond to the usual medication. Since TB is an airborne disease, the spread of TB and MDR can be rapid in crowded situations and public institutions such as hospitals or prisons, which potentially places millions of nonaddicted individuals at risk for a serious and possibly deadly disease.

Prenatal Effects

According to the National Institute on Drug Abuse, more than 5% of the 4 million women who gave birth in the United States in 1992 used illegal drugs while they were pregnant. Abusing drugs while
pregnant not only harms the body of the user but also the developing fetus. The full extent of prenatal exposure to drugs is unknown because there are many factors (such as the amount and number of drugs abused, extent of prenatal care, socioeconomic conditions, maternal nutrition, and other health conditions) that can make it difficult to determine the direct impact of a particular drug on fetal and child outcomes. But it is known that abusing drugs increases the risk of miscarriage and other developmental abnormalities. Premature birth can also occur. Studies on babies born to mothers who use cocaine have shown that they are often delivered prematurely and have low birthweights. Using drugs while pregnant can also increase the chances of the infant becoming dependent on the substance that is being abuse, which can result in the infant experiencing withdrawal symptoms after birth.

**Conclusion**

Substance abuse is a major problem in society today. Studies have shown that drug users have a greater risk of developing health problems than nonusers as a result of the negative effects that various drugs have on the body and other factors associated with the drug-using lifestyle. In addition, substance abuse can lead to the premature death of the user due to overdoses and drug-related accidents, homicides, and diseases. Based on estimates from a study conducted by The Lewin Group, drug abuse is one of the most costly health problems in the United States due to direct costs (health care costs associated with treating drug-related illnesses) and indirect costs (loss of potential productivity from crime-related costs, illness, disability, or death). In 2002 alone, the overall economic cost came to about $180.9 billion, with $15.8 billion of that amount attributed to health care costs and $128.6 billion to productivity costs. Given that substance abuse is a complex and pervasive health issue, education, prevention, and treatment efforts must encompass a public-health approach in order to effectively combat this costly disease.

Stacy B. Calhoun

See also

- Brain Chemistry and Addiction
- Fetal Effects of Alcohol and Other Drugs
- Hepatitis C
- High-Risk Behaviors
- HIV/AIDS
- Sexually Transmitted Diseases
- Tuberculosis

**Further Readings**


Khalsa, J., Francis, H., Mazin, R. Bloodborne and sexually transmitted infections in drug abusers in the United States, Latin America, the Caribbean, and Spain. *Clinical Infectious Diseases*
Medical Use of Marijuana

Medical marijuana (cannabis sativa) refers to the medically controlled use of marijuana or tetrahydro-cannabinol (THC, the main psychoactive ingredient in marijuana) by patients seeking a means to address medical problems including nausea, vomiting, weight loss, multiple sclerosis, asthma, inflammation, glaucoma, poor appetite, spasticity, chronic pain, and acute pain. There is a consensus that marijuana's medical use developed first in China, spreading to India, Rome, and Greece by the 1st century and eventually reaching Europe and Africa. The use of marijuana as medicine finally spread to the European colonies in North America sometime in the 18th century.

Thus, the use of medically controlled marijuana in the United States predates the 1937 Marihuana Tax Act, which rendered cannabis illegal even with a physician's prescription. Moral crusades condemning the use of marijuana for any purpose prior to the 1937 Marihuana Tax Act and widespread illegal use of marijuana since the passage of that law contributes to the contemporary controversy over developing clinical studies to assess the efficacy of medical treatments using marijuana. Although a few states did enact legislation (primarily in the 1970s and 1980s) that allows physicians to prescribe marijuana, federal law prohibiting this practice prevents physicians from prescribing marijuana as medication. Currently, the federal government of the United States does not recognize marijuana as serving any legitimate medical function. However, some synthetic cannabinoids, for example, dronabinol, fall into the Schedule III drug category. These synthetic cannabinoids mimic some of marijuana's medical effects while costing considerably more. However, because they have a standardized dosage, regulators consider these to have a low potential for abuse.

The contemporary debate over medical marijuana consists of two opposing arguments. One side of the debate suggests that medical marijuana is unnecessary because existing drugs address all conditions that medical marijuana may ameliorate. Opponents suggest that medical marijuana is more effective and less expensive than existing legal drugs. Although in the United States medical marijuana legislation is limited to compassionate use laws in approximately 13 states, global legislation (and attitudes) toward both marijuana and medical marijuana vary greatly, and there is a social movement industry centered around marijuana use, particularly decriminalizing-legalizing the medical use of marijuana.

Contemporary Debate

Many studies conducted in the 1970s, some of which resulted in follow-up studies in the 1980s and 1990s, confirm that cannabinoid drugs are effective in treating appetite loss, glaucoma, nausea and vomiting, pain, spasticity, and weight loss. Opponents of decriminalizing-legalizing marijuana for medical use contend that legal drugs, such as dronabinol, alleviate medical conditions as efficiently as marijuana. To this argument, supporters of medical marijuana reply that the presence of an existing treatment does not preclude developing and approving alternative treatments. For example, there is more than one drug therapy approved for the treatment of depression and more than one kind of pain medication. In addition, the legal cannabinoid drug dronabinol, which mimics the effect of marijuana, has more side effects than inhaled marijuana, costs more, takes longer for a patient to experience the beneficial effects, and presents ingestion difficulty for both vomiting patients and...
patients whose symptoms include throat swelling. It is also far easier for patients to control their
dosage of inhaled marijuana because they can monitor their body's reactions and cease inhaling
when undesirable side effects present themselves, an advantage that cannot be obtained with a
dosage-standardized pill.

Almost 40 years ago, tests demonstrated that inhaled marijuana was effective in treating

glaucoma by lowering pressure within the eye, thus protecting the patient from damage to the optic
nerve. However, alternative treatments developed in the late 1990s are equally efficacious in
safeguarding the optic nerve. Additionally, The American Academy of Ophthalmology does not
promote marijuana as a safe or effective treatment for glaucoma because while marijuana may
reduce intraocular pressure, at the high dosage required to treat glaucoma (8-10 per day) undesirable
side effects appear.

Further research on using medical marijuana to treat glaucoma is unlikely. Though studies show
that it is an effective means of reducing intraocular pressure, existing treatments protect the optic
nerve as effectively without the numerous side effects of a therapeutic dosage of marijuana.
However, professional organizations such as The American Academy of Ophthalmology and The
National Eye Institute, while not currently endorsing medical marijuana as a glaucoma treatment,
state their willingness to reconsider this position following further research.

Although case studies testing the effectiveness of inhaled marijuana on both specific and general
pain, including pain induced by surgical intervention, headache, and chronic illness do exist, it is
difficult to separate the actual effect of inhaled or ingested marijuana on physical pain from the
expectation that inhaled marijuana produces a pain-relieving effect (the placebo effect).

Conclusions drawn from large-scale studies assessing the effectiveness of marijuana on acute pain
are mixed. In one 1977 study, most respondents preferred a presurgical intervention of diazepam
(antianxiety medication) or a placebo to intravenous THC prior to tooth extraction. However, at least
one controlled experiment conducted in 1974 using more reliable measures of pain tolerance indicate
that higher doses of THC may reduce acute pain.

One 1975 study regarding the efficacy of marijuana for treating chronic pain resulting from
cancer demonstrated that chronic pain caused by cancer responds to high doses of oral THC (20 mg)
and high doses of codeine (120 mg) comparably. However, researchers also concluded that the
negative side effects of high-dosage oral THC were more negative than that of high-dosage codeine,
including anxiety, paranoia, dizziness, and depression. However, this study utilized oral, rather than
inhaled doses, which affects several factors related to the efficacy of treatment, including strength
and absorption of the drug. Although it is true that the use of marijuana induces side effects, not all
patients experience these effects, and indeed, some patients may prefer the side effects of marijuana
use to the pain cancer causes.

In addition to treating chronic pain resulting from cancer, numerous studies demonstrate that
both orally ingested and inhaled marijuana is effective in treating nausea and vomiting related to
cancer treatments. Studies also demonstrated that the synthetic cannabinoids nabilone and
levonantradol reduced nausea and vomiting when taken prior to treatment. The differing anti-emetic
effects of inhaled marijuana, ingested marijuana, and synthetic cannabinoids warrants further
research because inhaled marijuana is more cost-effective, offers patients more control over dosage,
and serves as an additional drug with which to rotate patients developing tolerance to existing anti-
emetics. Additionally, because medicines vary in their impact on the individual, some patients may
find inhaled marijuana more effective than standard antinausea drugs. Although it is true that
medically controlled marijuana does present side effects, patients may prefer these side effects to
chemotherapy-induced nausea.
U.S. Legislation

The 1970 Comprehensive Drug Abuse Prevention and Control Act divided substances into categories based on their medical use and potential for addiction. Marijuana, along with heroin, mescaline, and lysergic acid diethylamide (LSD), is a Schedule I drug, meaning that the Drug Enforcement Administration legally classifies marijuana and cannabis as (a) carrying a high potential for abuse, (b) without currently accepted medical use in the United States, and/or (c) lacking accepted safe use even with medical supervision. Even with this classification, for a brief period, the federal government allowed citizens to apply for relief from this law as part of a compassionate use program. A compassionate use exception would allow collection of data regarding the efficacy of medical marijuana; however, the federal government discontinued compassionate use exceptions in 1992 despite the increasing number of people who applied for it every year.

Since marijuana is a Schedule I drug, physicians cannot legally prescribe it, and possession of the drug can lead to large fines and/or jail time. However, the use of medical marijuana outside the United States, state legislation related to medical marijuana developed over the past 10 years, and contemporary efforts to reschedule marijuana to allow medical use provides evidence for the conflicting attitudes that characterize the current climate toward medical marijuana.

California's 1996 Compassionate Use Act (Proposition 215) states that a seriously ill Californian may use marijuana with a physician's recommendation that the patient might benefit from its use. Since 2000, legislators in Hawaii, Vermont, and Rhode Island have passed bills protecting seriously ill patients from prosecution for using marijuana as medicine. In 2007, New Mexico's legislators passed a law giving the state Department of Health a mandate to develop rules for the use and distribution of medical marijuana to patients authorized by the state. These are only some of the examples of state laws regarding medical marijuana.

A ruling in Conant v. Walters in 2002 found that federal authorities could not legally sanction physicians for frankly discussing medical marijuana with patients. Although the holding did not affect physicians' inability to prescribe medical marijuana, it did affirm that physicians could legally endorse or recommend the use of marijuana to patients.

Social Movements, Global Attitudes

National and international social movement organizations supporting the decriminalization or legalization of marijuana, particularly medical marijuana, continue to thrive. These social movement organizations include the Drug Policy Foundation and the Drug Policy Alliance operating in the United States, The National Organization for the Reform of Marijuana Laws operating in the United Kingdom and the United States, the European Movement for the Normalization of Drug Policy, and the International Anti-Prohibition League.

Drug laws in Western Europe vary widely from country to country. Today, in some European countries, it is a criminal offense to use medical marijuana; in some, it is a civil matter; and in a few, marijuana is completely decriminalized. Most recent legislation demonstrates a trend of moving away from harsh penalties for marijuana use and toward a harm reduction model that would allow more patients to access marijuana for medical use. In 2003, the Netherlands, continuing its trend of liberal drug policy and legislation, became the first country to enact federal regulations that allowed pharmacies to distribute medical cannabis.
In recent years, the United Kingdom moved toward harm reduction policies in its drug laws. Marijuana is decriminalized and simple possession does not result in arrest. However, in the United Kingdom, medical marijuana is not legal. This policy means that even patients using marijuana to address medical conditions are subject to verbal warnings and the confiscation of the drug. In Canada, patients may use medical marijuana if (a) they suffer from serious illness, (b) existing treatments do not provide relief for either the illness or symptoms related to treatment of the illness, and (c) the benefits offered to the patients outweigh the risks posed by use of marijuana. Mexico's drug laws are similar to the United States, and Mexico does not currently have any laws decriminalizing or legalizing medical marijuana.

Conclusion

Proponents of medical marijuana focus on the benefit of inhaling smoke rather than on ingesting pills when treating patients with nausea, as well as on the importance of developing medical alternatives for patients who fail to respond to conventional drug therapy. Current federal legislation in the United States creates difficulty for large-scale assessment of medical marijuana's effectiveness as a treatment, though older studies (primarily from the 1970s) confirm the efficacy of cannabinoids for treating a variety of maladies. Contemporaneously, following California's 1996 Proposition 215, several states enacted compassionate use laws that allow patients to use marijuana with a physician's recommendation without legal penalty. Opponents of legalizing and/or decriminalizing marijuana for medical purposes aver that existing drugs offer sufficient treatment for all medical conditions that may respond to marijuana, as well as argue that marijuana causes harmful physiological effects. Both the potential medical benefits and negative side effects created by medically controlled marijuana warrant further research.

Heather M. Griffiths

See also

Cannabis Youth Treatment Study
Decriminalization
Harm Reduction, Public Health
Marijuana
War on Drugs

Further Readings

Public Policy, Drugs

Drug policies vary by society. In many societies the use of psychoactive substances has been sanctioned and in many instances associated with spiritual and religious practices. In the United States, substance use policies have changed radically over time from a laissez-faire approach to highly regulated and policed policies. U.S. substance use policy began to change in the early 20th century as concerns arose about the morality of drug use. In recent years, the public debate has focused on whether substance abuse is primarily a public health or a legal concern. U.S. public policy today reflects both points of view, contributing to drug policy strategies that are frequently contradictory and at odds in how they function.

International Drug Policies

Psychoactive drug use has been an important part of many civilizations, often done in conjunction with religious and spiritual ceremonies. Many cultures have sanctioned psychoactive substance use, and some of those societies continue to be at the forefront of public policy efforts as exporters of psychoactive substances. In addition, many societies, including the United States, have historically sanctioned public gathering places for the explicit use of psychoactive substances (e.g., opium dens). Although several governments have taken action to reduce or eliminate such establishments, other nations have allowed some types of substance use in public establishments (e.g., the Netherlands).

Laws governing substance use differ greatly around the world. In some societies, substance use or drug trafficking can be punishable by death. Other nations view substance misuse as a public health problem and tend to use legal resources to leverage people into treatment services. Societies can have widely varied responses to different substances that reflect cultural views about the usefulness and risks associated with the substance in question. Furthermore, as societal norms concerning substance use change, policies change as well. The United States is an excellent example of how policies change as attitudes change.

History of Drug Use Policy in the United States

Until the 20th century, drugs were mostly unregulated in the United States. Many consumer products, such as medicines sold over the counter and beverages, included psychoactive substances. Concerns about the purity and safety of food and medicines led to the Pure Food and Drug Act of 1906, the first national effort to make drugs safer. In 1909, because of concerns about the morality of behavior in opium dens, the U.S. federal government banned smoking opium, representing the first national prohibition against any substance. The Harrison Act of 1914 was the first attempt to regulate other opioids and cocaine by requiring distributors to report their activities and pay taxes on their goods. Subsequent regulations and court rulings strengthened the restrictions on these substances during the next couple of decades. Heroin became the third substance banned by the government in 1924 (alcohol was the second).

During the period that resulted in alcohol prohibition, public campaigns initiated by citizens groups concerned about the morality of drug use appealed to the dangers of certain substances, such as marijuana and peyote. Marijuana (or hemp) plants had been used for many years in the United States and had been sold as a cash crop.
States to create rope; therefore, the plant was widely available. During the 1920s, marijuana use increased, presumably as an alternative to alcohol (which had been banned). The Uniform State Narcotic Act, passed in 1932 to encourage adoption of federal drug legislation by states, also granted (and encouraged) states to ban cannabis use. Public prohibition campaigns used fear messages to dissuade use of marijuana by the public. One by-product of this effort was a motion picture titled *Tell Your Children* (more commonly known by its rerelease name of *Reefer Madness*), produced by a religious group in the mid-1930s, which linked marijuana use with loss of control and morally inappropriate behavior. The movie was credited with spawning new legislation in 1937 that required marijuana producers and sellers to purchase federal tax stamps, although no tax stamps were ever produced, effectively banning marijuana use in the United States. Peyote (mescaline), on the other hand, was used primarily by American Indians in religious ceremonies. As part of governmental efforts to outlaw traditional Native practices (for fear of insurrection), peyote was banned by many states around the same time. However, in recent years, freedom of religion legislation has restored the rights of Native Americans to use the psychoactive substance in religious practices.

Beginning in 1938, many substances became subject to regulations of the Federal Food and Drug Administration that required testing for medical efficacy and safety. In 1951, the Boggs Act introduced the concept of mandatory minimum sentences for violations of drug use laws. Perhaps the most influential legislation concerning substances was enacted in 1970 with the passing of the Controlled Substance Act, which instituted the federal schedule of controlled substances. Five schedules were developed by the federal government based upon relative risk for addiction and relative medical usefulness. Schedule I substances, according to the act, constitute the highest risk for addiction and have no medical usefulness, whereas Schedule V substances have been identified as lowest risk for addiction and having the greatest medical usefulness. Examples of substances and their schedules include heroin (Schedule I), cocaine (Schedule II), morphine (Schedule III), benzodiazepines (Schedule IV), and some codeine cough syrups (Schedule V).

However, there is heated debate concerning the accuracy of the federal schedule, with many researchers arguing that the schedules reflect political agendas more than they reflect scientific reality. For example, marijuana is a Schedule I substance but there is evidence that it is much less addictive than other substances scheduled below it and that it may be medically useful. On the other hand, there is growing evidence of widespread abuse of prescription drugs in the United States among all age groups and social classes, especially for Schedule III opioid drugs for pain and for Schedule IV benzodiazepines prescribed for anxiety. Enforcing policies to control the rising abuse of prescription medicines is complicated by competing interests of pharmaceutical companies that heavily market their products to physicians, other prescribers, and now to the public in mass media.

**Prevention Efforts and Research**

Before the middle of the 20th century, there was little concerted effort to prevent substance abuse in the United States. Current efforts to prevent drug abuse in the United States focus on promoting abstinence and using interdiction. Government and privately funded advertising campaigns have been used to dissuade adolescents and young adults from initiating substance use. Many of the advertising campaigns use fear or guilt messages in order to prevent substance use or promote abstinence. The research suggests that these efforts have not been particularly successful in reducing substance use in society and that fear messages are not particularly efficacious in modifying substance use, especially among adolescents and young adults. Efforts also have been made to link substance use campaigns with concerns about the spread of HIV, and these campaigns tend to use fear messages to promote abstinence.
School-based campaigns have generally focused on promoting abstinence as a goal. Many of these programs, developed with an eye to the D.A.R.E. model, have promoted a theme of "just say no" to drug use. Researchers who have studied school-based abstinence approaches to substance prevention have found that they are generally not effective. Although researchers have consistently found fault with abstinence-only programs, the federal government continues to favor these initiatives while actively opposing efforts that do not insist on abstinence.

Another major prevention effort by the federal government includes substantial funding of research to identify genetic causes and treatment for people at risk for developing substance use problems. Although evidence of heritability has been revealed by research, progress on identifying genetic markers associated with specific patterns of substance use has been slow. Since there are so many different presentations of substance use, it is highly unlikely that a single pattern will emerge. In addition, money being spent on these efforts will not help to prevent other psychosocial risk factors for drug abuse that have been identified by research (such as interpersonal stress and poverty).

The U.S. war on Drugs

The greatest federal expenditures to curb drug abuse have been earmarked to enforce drug laws and eradicate international production sources. The so-called War on Drugs was initiated by President Nixon when he declared drug abuse to be a security threat to the United States. In 1973, he formed the Drug Enforcement Agency (DEA) to coordinate interdiction efforts. The DEA has worked with other federal agencies to intervene in drug production, sales, and use in the United States and in many other countries. The U.S. government also has used financial incentives, including promises of or threats to decrease foreign aid, to influence drug policies in other countries.

The controversial War on Drugs has not reduced substance use in the United States. The War on Drugs has cost U.S. taxpayers billions of dollars, and the costs are escalating rapidly. Many of the costs are related to incarceration of inmates. More than 1 million inmates are estimated to have substance abuse problems, and a majority of inmates are imprisoned on charges that can be directly or indirectly linked to substance abuse. The incarceration rate for inmates of color is especially high and disproportionate to representation in U.S. society, leading many social scientists to conclude that the War on Drugs is not only ineffective but also biased against people of color.

Partly as a reaction to the War on Drugs, there have been grassroots efforts to decriminalize substance use. These efforts have not produced many changes in policy, but they have resulted in some states enacting laws that allow medical use of marijuana for certain chronic conditions under the supervision of a physician. Twelve states have passed laws to this effect, although the federal government, upheld by the courts, has asserted that federal drug laws supersede states' rights when it comes to legalization of marijuana.

Drug Treatment and Research

Abstinence-based Twelve-Step therapy has been the predominant treatment model for drug problems in the United States. Other best practices for treating drug problems have been developed and empirically tested, including cognitive behavioral therapy and motivational interviewing. Unfortunately, many treatment providers have been slow to embrace best practices. Furthermore, researchers have found evidence that complete abstinence is not necessarily a requirement for positive outcomes from drug treatment. Pharmacological researchers have developed and empirically tested promising medicines that interfere with substance-induced euphoria and reduce
drug cravings that are now used in conjunction with efficacious psychotherapy to successfully treat drug problems.

Many developed nations do not promote abstinence-only goals and commonly utilize harm reduction strategies (e.g., needle exchanges to prevent communicable diseases). Although many harm reduction programs have been shown to improve health outcomes and to reduce health risks among drug users, the United States has been slow to embrace them. In spite of substantial evidence of effectiveness, key U.S. policymakers view harm reduction programs as condoning morally unacceptable drug use.

Conclusion

Drug policies vary widely around the world. In addition, drug policies often vary across substances, with culturally sanctioned substance use dealt with more permissively than substance use that is considered immoral or unhealthy. Drug policies in the United States have not been effective in reducing substance-related problems in the United States. The federal schedule for controlled substances appears to be an obsolete document that does not reflect the current research on risks and benefits of various substances. The War on Drugs has by most accounts been a failure. The net effect of the War on Drugs has been to drive substance use underground, reducing the accessibility of treatment services for substance users because of concerns about legal repercussions, and the war has cost society billions of dollars that have been set aside for law enforcement and corrections efforts in a revolving door system that leaves many incarcerated substance users untreated. Developed nations that have focused on developing public health policies to address drug problems rather than on policing efforts do not have the level of substance abuse problems experienced by the United States. The United States would likely benefit from refocusing its public drug policy from the War on Drugs to public health efforts including use of best prevention and treatment practices.

Arthur W. Blume See also

Evidence-Based Treatment

Public Policy, Alcohol

Public Policy, Prevention

Public Policy, Treatment

Further Readings

War on Drugs

The War on Drugs may best be described as a longstanding effort ranging from limitation to eradication of the production, distribution, sales, and use of primarily illicit psychoactive substances. In addition, some proponents of the War on Drugs have expanded the mission to address the continuing production, distribution, sales, and use of legal psychoactive substances. This war is unique in that it has historical significance, presents administrative and policy challenges, has evolved in a sociopolitical context, and continues to advance in scope and meaning today.

During the late 1960s, President Richard M. Nixon refueled the national campaign against illicit drug use by referring to drugs as "Public Enemy Number One." During the Nixon administration, the 1970 Controlled Substances Act was passed. This key legislation produced many changes in terms of drug regulation and penalties for possession and sales. This act was responsible for the following:

Nixon's War on Drugs (coined in 1971) emphasized the importance of treatment and prevention as primary strategies in combating drug use. A public health approach was utilized to offer available services to addicted persons and their families. This was one of the few periods in history when the War on Drugs emphasized pathology and treatment instead of deviance and criminal justice interventions. Although treatment provided a practical strategy, it was merely one tactic that was used to address an enormous problem. Alongside treatment, one must consider the importance of additional war initiatives such as domestic law enforcement, interdiction efforts, and international efforts aimed at targeting illicit drug use. These components evolved in their own right and set the course for the direction of the contemporary War on Drugs.

In 1972, the Nixon administration established the Office of Drug Abuse Law Enforcement (ODALE), and in 1973, the DEA. The DEA was created as a centralized organization composed of members of ODALE, Customs, the CIA, and smaller factions. Its primary purpose was to merge all facets of legal and administrative controls in targeting illicit drug abuse. Abroad, the United States worked with allied nations such as Canada, France, and Mexico to diminish the threat posed by cocaine, heroin, and marijuana.

Following Nixon's resignation in 1974, the Ford administration is less recognized for any significant contributions to the War on Drugs. In 1978, the Carter administration supported the decriminalization of marijuana and the ending of federal penalties for possession of small amounts of marijuana. Further, asset forfeiture was introduced as part of a revision to the Controlled Substances Act.

During the Reagan era, the drug war continued to gain momentum while grounded in rigid philosophies and backed by militaristic interventions. Reagan's drug policies supported a trend toward domestic and international law enforcement as a primary strategy in the War on Drugs. The Reagan administration advocated for mandatory federal sentencing for drug-related offenses, supported insurgent groups affiliated with drug trafficking for political strategy, and instituted a federal death penalty for drug lords. Some feel that the U.S. economic and military support provided to many of these factions may have facilitated the materialization of present-day terrorist groups. In the spirit of a militant atmosphere, a zero tolerance policy (a criminal justice approach to drug control) was adopted. Zero tolerance refers to a federal prohibition against the import or export of illicit drugs in the United States and to significant penalties for possession or sales. Consistent with this philosophy, First Lady Nancy Reagan was celebrated for promoting the "Just Say No"
campaign. Called simplistic and impractical by critics, the message was directed toward youth as a strategy for dealing with drug pushers or the peer pressure often associated with drug abuse.

The Anti-Drug Abuse Act of 1988 was instrumental in establishing the Office of National Drug Control Policy (ONDCP). Its mission was to create policies and priorities to reduce illicit drug trafficking, manufacturing, and sales. In addition, it is charged with targeting drug-related crimes and violence, and in addressing public health concerns relating to illicit drug use. Further, the Anti-Drug Abuse Act of 1988 (amended in 1996) created a cabinet-level position of the Executive Office of the President known as the drug czar. The drug czar is the director of the ONDCP.

The Clinton administration surpassed the legacy of its predecessors by using the criminal justice system and the military as primary interventions in the drug war. During the Clinton era, incarcerations for nonviolent drug offenses escalated and appeared to be a major tactic in the War on Drugs. The U.S. military broadened its operations to target regions abroad that were most associated with illicit drug production and export. In the United States, concerns over marijuana use (reminiscent of the 1930s) resurfaced. Medicinal use of cannabis and advocacy for legalization of the drug triggered considerable government backlash. Some analysts argue that communities and families were those most affected by the drug policies of the 1990s. Again, a considerable amount of resources were invested in strategies that were less than optimal for reducing the evident threats of drug use in the United States.

The Reauthorization Act of 1998 expanded the authority and functions of the ONDCP. It prioritized a national drug control strategy, committed funding for a 5-year national drug control program, granted authority to high-density drug trafficking areas (particularly border areas), and reorganized the ONDCP and other national drug control agencies.

The George W Bush administration persisted in utilizing economic and military resources to eradicate illicit drug use. Unfortunately, the reality of terrorism shifted national priorities, but it did not dismiss them. It is evident that the War on Terror has depleted existing resources that may have been previously allocated for drug control. Although parallels may exist between the two campaigns, caution should be utilized when deriving causal inferences. President Bush was instrumental in supporting the expansion of drug abuse education and treatment programs in the United States. However, the Bush agenda was laden with religious ideologies as paths to recovery and evidenced by considerable financial support for faith-based addiction and recovery programs. Although some revere the utility of faith-based programs, many others view them as problematic and ineffective. Bush advocated for and committed federal support to the high-density drug trafficking areas in the United States. Bush promoted aggressive community and family education programs and supported the allocation of funding for drug testing in schools.

Consequences of the Drug War

Economic Costs

According to the ONDCP budget summaries, the United States is spending approximately $13 billion per year on the War on Drugs. When factoring in additional rising costs for drug-related incarcerations and state and federal corrections, these figures may be inaccurately low. Of these dollars, approximately two thirds is spent on supply reduction activities, while approximately one third is spent on treatment, prevention, education, and research. Figures relating to the War on Drugs vary significantly across sources and are often contextually determined. The majority of resources spent on controlling illicit drug use in the United States primarily supports drug-related law enforcement activities and the incarceration of drug offenders.
Personal Costs

Approximately 29,000 people die of drug-induced causes in the United States each year. These figures do not include drug-related homicides, suicides, or accidents.

Communities and families have experienced innumerable hardships and losses due to continuing drug use and the current War on Drugs. The development of the drug trade within economically disadvantaged communities has created a breeding ground for illicit activity including violence and crime. Sadly, funding to these communities for necessary resources is often limited by allocations for public safety and corrections.

Racism

The War on Drugs has been notorious for its association with racism. Beginning with the Opium Wars, concerns over Chinese immigrants stirred panic in the United States and led to restrictions that directly affected the Chinese (particularly restrictions over opium use). Mexicans and African Americans were also targeted as marijuana "fiends" during the early 1900s. Mexicans were seen as threatening because they used marijuana and brought it into the United States. In addition, Mexican workers competed for employment with American workers. African Americans were characterized as hypersexual and violent under the influence of marijuana. Disproportionate numbers of minorities (particularly African Americans) in the criminal justice system demonstrate compelling evidence for racist practices in the disposition of drug offenders. Evidence from varying sources substantiates the premises that Caucasians are more likely to receive probation for similar offenses than African Americans or Hispanic Americans and are less likely to receive state or federal incarceration as compared with minorities.

Crime and Criminal Behavior

Some argue that the U.S. War on Drugs has been a futile attempt at restricting individual rights and has actually increased criminal behavior. Alcohol prohibition and the expansion of organized crime is an example of this point. Other problems seem to emerge when drug controls are enforced, for example, an increase in drug trafficking, in underage use of illicit substances, in the use of illegal paraphernalia, and in crimes committed while under the influence. However, caution should be utilized with making assumptions about drug use and crime and violence because drugs have variable effects and may or may not be associated with these behaviors. The War on Drugs was intended to reduce illicit substance use, an identifiable social problem. While attempting to reduce crime and related problems, it may inadvertently be contributing to them.

Conclusion

The War on Drugs is both a national and an international effort to reduce the sales, distribution, and use of illicit psychoactive substances. In the United States, the War on Drugs is controversial. It has shifted emphases over time, and has both favorable (i.e., research efforts, treatment options) and unfavorable consequences (i.e., elevated incarceration rates, human rights violations). Abroad, the War on Drugs has encountered similar obstacles. Historically, efforts to reduce or eliminate illicit drug use have been unsuccessful in accomplishing their aims and have contributed to larger problems both at home and abroad. The inclusion of the military and state and national law enforcement has altered the course of Nixon's War on Drugs. For some, it is considered necessary and consistent with ideologies established for public safety. For others, it is seen as a violation of
individual rights and a form of unconstitutional government control. Today, the War on Drugs is characterized as an ineffective campaign, one with a compromised integrity due to economic and political variables. The economic costs of a sustained war are escalating, while strategies to resolve illicit drug trafficking and related activities are unattainable. Although the current War on Drugs is well intended, it may require some fine-tuning to achieve optimal goals.

Joseph L. Smith See also

 Demand Reduction
 Drug Laws, History of
 National Drug Control Strategy
 Office of National Drug Control Policy
 Public Policy, Drugs
 Supply Reduction

Further Readings


War on Drugs