

# The challenges in developing a rational cannabis policy

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**Current Opinion in Psychiatry** 2009, 22:258–262

## Purpose of review

A rational cannabis policy would arguably be one that minimized the harms of both cannabis use and the legal policies adopted to control its use. We, therefore, review recent epidemiological evidence on the harmful effects of cannabis use and social research on the costs and benefits of cannabis prohibition.

## Recent findings

Epidemiological evidence suggests that cannabis increases the risk of road crash injury if users drive while intoxicated. When used chronically, cannabis can produce dependence, respiratory disease and psychotic symptoms, especially in vulnerable young adults. It probably also increases poor educational outcomes and possibly increases the use of other illicit drugs, although it is debated whether these relationships are causal. Proponents of a relaxation of cannabis prohibition argue that prohibition has failed to deter cannabis use, incurs substantial economic costs, has generated a large black market, has increased the potency of cannabis and users' access to other drugs and involves foregone tax revenue from the legal sale of cannabis.

## Summary

Development of a more rational cannabis policy requires better evaluations of both the health consequences of regular cannabis use and of the costs and benefits of enforcing the existing prohibition on its use. It also requires the liberalization of the international control system to allow member states to experiment with different methods of regulating and controlling cannabis use.

## Keywords

autonomy, cannabis, drug control, evidence-based policy, policy research, public policy

Curr Opin Psychiatry 22:258–262  
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0951-7367

## Introduction

If we define a rational social policy as one that uses the most efficient means to pursue a society's goals, then there can be no uniquely rational cannabis policy unless there is societal agreement on what the goals of the policy should be. Such policy goals, however, depend on deeper beliefs about the priority that should be given to competing ethical values such as individual freedom and the protection of human health and well being. These turn on questions about what role, if any, the state should have in restricting human behavior that primarily harms the individual. There are major differences of opinion about these issues in most liberal democracies.

For Millian libertarians, the only relevant factor in deciding on a policy towards cannabis is that individuals should have the liberty to pursue their own choices so long as they do not harm anyone else [1\*]. Harms arising from cannabis use that affect the user are solely the user's concern; harms that a user may cause to third parties (such as car crashes if users drive while intoxicated) are matters for the criminal law. A rational cannabis policy for

a libertarian would, therefore, be one that allowed any adult to use the drug if they wished. The only restrictions on its use would be limiting this to those over the age of adult autonomy (18 or 21 years) and banning use by adults in situations that put others at risk, for example, driving a car while intoxicated [2].

Legal moralists, by contrast, believe that (at least some types of) drug use is inherently wrong (e.g. because they are intoxicating or undermine autonomy), and that such wrongful behavior should be criminalized [3]. For legal moralists, a rational cannabis policy then would be one that prohibits its use and imposes criminal sanctions on those who use it. Any societal costs in enforcing the law are irrelevant to legal moralists, because they argue that just as laws against murder and theft are inherently right (and so not evaluated by the costs incurred in enforcing them) so laws prohibiting the use of cannabis would also be right and rational.

Many people reject both the libertarian and legal moralists' views. They are at least conditionally prepared to accept that the state may have the right to restrict adult

choices if there is good evidence that these choices cause harm to individuals and society [4<sup>•</sup>,5<sup>•</sup>]. Anyone who takes this view would want to know whether prohibiting cannabis use prevents these harms and if so, whether this outcome is achieved at an acceptable social and economic cost [2]. This approach to policy formulation requires some form of social accounting that examines the costs and benefits of both cannabis use and the enforcement of the prohibition on such use [6<sup>••</sup>]. A major problem in undertaking any such accounting is that advocates of both liberalization and of a continuation of criminal penalties for use often have very different views on what these costs and benefits are. The following account briefly indicates what these contested views are [2,6<sup>••</sup>].

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### The harms of cannabis use

The harms of cannabis use can be beneficially divided into acute harms that arise from a single or a few occasions of use and chronic harms that arise from repeated use, often near daily use, that occurs over months, years and decades.

The main acute risks for cannabis users include anxiety and panic, especially in naïve users, and an increased risk of accident if a person drives a motor vehicle while intoxicated with cannabis [7<sup>•</sup>]. Women who smoke during pregnancy are more likely to have a low birth weight baby [2].

The most probable adverse health effects of chronic cannabis use are: a cannabis dependence syndrome [8]; chronic bronchitis and impaired respiratory function in regular smokers; cardiovascular disease in older adults who continue to smoke into middle age; respiratory cancers in very long-term daily smokers [2]; and psychotic symptoms and disorders in heavy users – especially those with a preexisting history of such symptoms, a family history of such disorders or who begin use in their early teens [2,9<sup>••</sup>]. Among the most probable adverse psychosocial effects of regular use among adolescents are: an increased risk of cannabis dependence [10<sup>•</sup>]; poorer educational involvement and reduced educational attainment [11<sup>•</sup>]; and a higher risk of using other illicit drugs [12]. The existence of these relationships between adolescent use and psychosocial outcomes remain contentious because of the possibility that the associations are due to residual confounding rather than cannabis use [12,13].

Most of the adverse health effects of cannabis use are more likely to be experienced by regular users of the drug [2,6<sup>••</sup>]. The most conspicuous exception is a probable increased risk of a motor vehicle crash if a cannabis user drives while intoxicated [14]. The increase in the risk of a road crash is less than that for alcohol-intoxicated drivers, but the effect is of policy significance.

The public health impact of contemporary patterns of cannabis use is modest by comparison with those of other illicit drugs (such as the opioids) or with tobacco or alcohol [2,6<sup>••</sup>]. In the case of illicit drugs, this reflects the absence of fatal overdose risk from cannabis. In the case of alcohol, it reflects the much lower risks of death from cannabis-impaired than alcohol-impaired driving, fewer adverse effects on health and lower rates of regular cannabis use to intoxication. In the case of tobacco, it reflects the much lower rate of persistence of cannabis smoking into older adulthood [2].

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### The costs and benefits of cannabis prohibition

Opponents of cannabis prohibition make a number of criticisms of it. First, they argue that prohibition has failed to deter cannabis use. Globally, cannabis is the most widely used illicit drug, with an estimated 162 million (4%) of the world's adults having used it in 2004, a 10% increase on use in the mid-1990s. In some countries, substantial proportions of all adults and most young adults have used cannabis [15,16]. In the United States in 2005, for example, 40% of the adult population reported trying cannabis at some time in their life, and 13% of adolescents reported use in the past year [17]. Those who defend prohibition argue that rates of cannabis use would be much higher and more persistent if its use was legal [5<sup>•</sup>].

Second, often the substantial police and judicial resources that are devoted to enforcing the prohibition on cannabis use are not available for the enforcement of other criminal laws [18].

Third, cannabis is a much more expensive commodity under prohibition than it would be if it was sold in a legal market at a price that reflected the costs of production and distribution [2]. Its black market price reflects economic compensation for the risks of arrest and imprisonment [18] and, critics argue, this generates large profits that can be used to corrupt law enforcement officials [16]. However, because cannabis is easily grown indoors, it is very difficult for police to prevent its cultivation, and so there is less need for cannabis growers to corrupt law enforcement officials [2].

Fourth, critics also observe that there is no control on the quality of the cannabis sold in the black market [16]. Its  $\Delta$ -9-tetrahydrocannabinol (THC) content can vary in unpredictable ways, and minors can purchase it in the absence of age restrictions. The retail cannabis black market is also not separated from that for cocaine and heroin, so cannabis buyers may be offered other illicit substances [15].

Fifth, the largest monetary cost of cannabis prohibition is the foregone tax revenue that could be raised if cannabis

was a legal commodity and taxed similar to alcohol and tobacco [19<sup>•</sup>]. We cannot, however, simply assume that the taxation revenue under a legal market would be the same as the black market value of cannabis. The price of cannabis would probably be lower in a legal market in order to undercut the black market [20]. Consumption could increase if there was rising demand among individuals who were previously deterred by prohibition, and if current users used more often and for longer [20,21]. Without knowing how sensitive cannabis use would be to a lower price, it is difficult to estimate what the total tax revenue would be in a legal cannabis market. Revenue could nonetheless be substantial even if not as large as that generated by the black market.

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### Other social costs of cannabis prohibition

The risk of arrest is only 1–3% per annum in Australia, Canada and the United States [2]. This probably explains the minimal deterrent effects of prohibition, given the importance of a high risk of detection to any deterrence effect [15]. The low rate of detection and prosecution for cannabis use prompts two further criticisms. First, the failure to enforce a widely broken criminal law brings the law into disrepute among the young who break the law without being prosecuted. There is no research on the impact of disobedience to cannabis prohibition on public attitudes towards the rule of law, but this hypothesis deserves investigation. Second, the prohibition against cannabis use is often applied in a discriminatory way against unemployed and socially disadvantaged men in New Zealand [22] and Hispanic and Black minorities in the United States [6<sup>••</sup>].

Critics also argue that criminal penalties fail to deter the minority of cannabis users who are arrested for using cannabis [15,22]; it also gives them a criminal record that adversely affects their lives [15] in ways that are more serious than any harms caused by their cannabis use [6<sup>••</sup>,16].

Some critics argue that under prohibition users are given misleading information about the health effects of cannabis [23]. They argue that exaggerated claims about the adverse health effects of cannabis make young people sceptical about any health information. A related concern is that if we tell young people that the health risks of cannabis are as bad as those of heroin and cocaine, then benign experiences with cannabis may encourage young people to underestimate the adverse health effects of heroin and cocaine [24].

Cannabis prohibition also prevents some patients with serious chronic illnesses, such as AIDS and cancer, from using cannabis for medical purposes [25]. There is some

evidence that THC is a modestly effective antiemetic in the treatment of nausea and vomiting caused by cancer chemotherapy, it stimulates appetite in patients with AIDS-related wasting and it has analgesic and antispasmodic effects [26]. The number of persons being denied these benefits is hard to quantify, but one estimate was that there were 14 000 potential patients in a population of 5 000 000 adults in New South Wales, Australia [26].

Other putative benefits of cannabis use are much more conjectural. There is no evidence that recreational cannabis use improves mental health, as may be the case with moderate alcohol use [27,28]. The evidence is at best mixed on whether increased cannabis use reduces the use of more harmful drugs such as alcohol [2,29].

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### Choosing between evils

The formulation of a rational cannabis policy requires a societal process for trading off the costs and benefits of cannabis use against the costs and benefits of prohibiting its use [2]. Ideally, in a democratic society, this process is, and ought to be, a deliberative process in which all the information and arguments that are relevant to the issue are fairly considered.

In most morally pluralistic liberal democracies, the formulation of public policies often falls short of this ideal [11<sup>•</sup>]. Cannabis policy, for example, has to compete with a myriad of other pressing issues (such as terrorism, climate change, oil prices, unemployment, interest rates and more) for public and political attention. The time given to cannabis policy is often accordingly brief, and policy debates often radically simplify the deliberation process, with evidence of harm caused by cannabis use often taken as supporting current policy [11<sup>•</sup>]. International drug control treaties severely restrict the available policy options by excluding any form of legal cannabis market [6<sup>••</sup>].

Politics being the art of the possible, the usual outcome is a policy compromise that is the most acceptable to the most powerful and influential citizens. The policy compromise that has emerged over the past 20 years in many developed countries has been a choice between de-jure or de-facto depenalization of cannabis use. The former policy that involves legislating to remove criminal sanctions for cannabis possession (and sometimes cultivation) for personal use has been adopted in some Australian and US states and in some European countries [6<sup>••</sup>]. The latter policy is the more common one: penal sanctions remain in the statute but they are not enforced, or more often enforced selectively, with the courts routinely fining or diverting the minority of users who are prosecuted to education and treatment [2].

De-jure depenalization of cannabis use has a number of advantages. First, it nominally removes criminal penalties for engaging in self-injurious behavior [1<sup>•</sup>]. Second, it brings the statutory law into line with actual practice that is to not enforce the prohibition on cannabis use or to impose criminal penalties on the minority of users who come to police attention.

Depenalization also has a number of major weaknesses [6<sup>••</sup>]. First, it may in fact lead via ‘net-widening’ to an increase in the number of cannabis users caught up in the legal system [6<sup>••</sup>]. If it is easier for the police to fine cannabis users than to prosecute them, then, more cannabis users may be fined, and those who fail to pay fines may end up before the courts, as has happened in some Australian states [6<sup>••</sup>]. Second, depenalizing cannabis use does not address the problems of the cannabis black market [6<sup>••</sup>]. Indeed, it can reasonably be criticised as hypocritical to permit people to use cannabis, but not allow a legal market to supply the drug. Third, the policy does not provide a stable long-term policy solution. Political pressure often builds either for further liberalization, or, as has happened more recently in Australia, the UK and the United States, for a return to criminal penalties. The third weakness can be reframed as a virtue [11<sup>•</sup>] if it allows for a more considered cannabis policy to evolve over the next several decades (during which political enthusiasm for free markets may have moderated).

## Conclusion

Ideally, a more rational cannabis policy could emerge that will be based on a more accurate evaluation of the health and other consequences of regular cannabis use [30] and a better appreciation of the costs and benefits of enforcing prohibition.

This will only happen, however, if governments are prepared to fund the necessary research on both of these important sets of policy issues [2] and if the international control system is liberalized to allow member states to experiment with different methods of regulating and controlling cannabis use [6<sup>••</sup>].

## References and recommended reading

Papers of particular interest, published within the annual period of review, have been highlighted as:

- of special interest
- of outstanding interest

Additional references related to this topic can also be found in the Current World Literature section in this issue (pp. 331–332).

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