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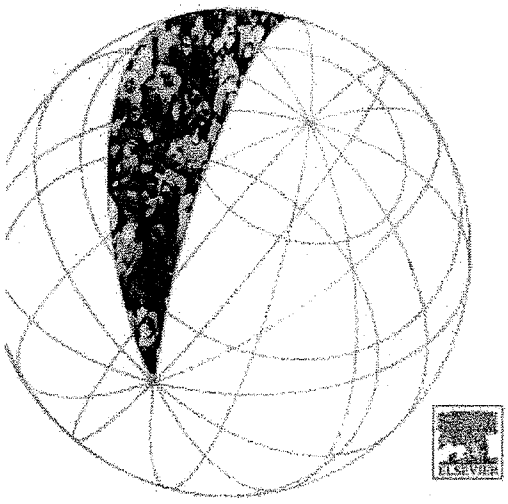

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The Control and Regulation of Currently Illegal Drugs

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Introduction

Worldwide debate continues regarding the best way to control the use of psychoactive substances. The distinction between currently legal and illegal drugs is not based on any analysis of the benefits of the drug or the best way to maximize the positive aspects and reduce harms. There is an increasing recognition that criminal justice tools, in isolation, are ineffective to manage the criminal, health, and social problems associated with illegal drug use

(Bertram *et al.*, 1996). Evidence suggests that drug prohibition not only fails to address the problems, but also produces significant negative health and societal impacts. To address the problems created by drug prohibition the concept of a regulated market for all currently illegal drugs is being developed. This concept has grown out of the harm-reduction movement in which services are provided to active drug users without requiring abstinence (Health Officers Council of British Columbia [BC], 2005) Regulated market models are based on both public health and human rights principles that recognize psychoactive drug use as being a choice made by many people around the world.

Context of Use and Size of the Issue

Psychoactive drugs are used by many species and have been used by humans for as long as history has been recorded. Psychoactive drugs alter brain function, resulting in temporary changes in mood, perception, and behavior. These drugs may be used recreationally to intentionally alter one's consciousness, as entheogens (Ruck *et al.*, 1979) for ritual or spiritual purposes, or as medication. Psychoactive substance use occurs along a spectrum from beneficial use, to nonproblematic use, through to problematic or harmful use, when use becomes habitual despite negative health impacts. Physical dependence may develop in some classes of drugs.

The *2006 World Drug Report* estimates that 200 million people, or 5% of the global population age 15–64 years have used currently illicit drugs as defined by the United Nations (UN) at least once in the last 12 months (UN Office on Drugs and Crime, 2006). This rate of drug use supports the concept that the majority of users are not addicted. Persons who use drugs do so because of perceived benefits in terms of the drug's desirable effects whether they are mental, physical, social, or spiritual. When addiction does develop, the reasons for it are a complex interaction of biological, psychological, social, spiritual, and environmental factors. In response to this complexity, a public health model has much to offer in the structuring of pragmatic responses (Tucker *et al.*, 1999).

Harms from drugs come from a variety of causes, which include toxicity (e.g., liver cirrhosis), overdose, addiction, and behavioral (e.g., drinking and driving) issues. Some drugs have minimal adverse behavior changes and few toxic effects, such as marijuana (Kalant *et al.*, 1999). Other drugs are highly toxic or are associated with undesirable behaviors such as crystal methamfetamine. An evidence-based approach to the control of drugs must recognize the benefits while minimizing the harms. Responding to both the harms and benefits of drugs will require drug-specific approaches rather than a one-size-fits-all approach.

History

Drug laws have been a common feature of human culture throughout history. Alcohol was prohibited under Islamic law and banned by the Koran more than a thousand years ago. Tobacco smokers returning from the Americas to Spain in the sixteenth century were subjected to torture, and in Russia Czar Michael Federovitch executed anyone on whom tobacco was found.

The United States antidrug legislation began in the late nineteenth century when smoking opium was banned in opium dens in San Francisco in 1875. The law was reported to have been a response to moral panic based on the fear that women, young girls, and young men were induced to visit the Chinese opium dens and were ruined morally and otherwise. These laws affected the use and distribution of opium by Chinese immigrants but not the use of laudanum, a combination of opium and alcohol used by Caucasian Americans. The laws were racist in both origin and intent.

In the United States the Harrison Narcotics Act was passed in 1914. This act required sellers of cocaine and opiates to have a license (usually only given to Caucasian people). It was originally intended to act as a revenue-tracking mechanism requiring a paper trail between doctors, drugstores, and patients. In 1920, the Supreme Court upheld, as a violation of the Harrison Act, that if a physician provided prescription narcotics for an addict, s/he was liable to prosecution. The Controlled Substances Act in 1970 replaced the Harrison Narcotics Act as the primary drug law in the United States. Drugs were classified according to their medicinal use, potential for abuse, and their likelihood of producing dependence.

The UN Single Convention on Narcotic Drugs was introduced in 1961, and this established the current system of global drug prohibition. It considered that addiction to narcotic drugs constituted a significant evil for the individual and economic danger to society. U.S. President Richard Nixon's War on Drugs began in 1969. Countries throughout the world have accepted drug prohibition because of the enormous pressure from the U.S. government, which continues to lead the War on Drugs and has found drug prohibition useful for its own purposes (Levine, 2002). The UN Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances was adopted in 1988, which further entrenched the prohibitionist framework.

The United States has the highest prison population rate in the world (Walmsley, 2003). According to the U.S. Justice Department, "while the number of offenders in each major offence category increased (from 1995 to 2003), the number of persons incarcerated for a drug offense accounted for the largest percentage of total growth (49%)" (Harrison and Beck, 2005b: 10).

There are many parallels between drug prohibition and alcohol prohibition. Despite the prohibition of alcohol going into effect in 1920, alcohol was readily available in most of the United States. Beer drinking was reduced, but consumption of stronger, hard liquor increased. When alcohol use was outlawed, it gave rise to gang warfare and spurred the formation of some of the most well-known criminals. The end of prohibition in 1933 led to an immediate decrease in murders and robberies.

Public Health and Social Harms of Prohibition

Tobacco and alcohol are currently legal drugs in most countries and have been branded and advertised. The long history of the commercialism of these two legal drugs has intentionally increased consumption of these drugs, both of which have significant potential for harm. Their widespread use results in greater morbidity, mortality, and overall economic costs than illegal drugs (World Health Organization [WHO], 2003; Rehm *et al.*, 2006). Therefore, an evidence-based model with the goal of reducing health and social harms from psychoactive substances should also include tobacco (Borland, 2003; Callard *et al.*, 2005) and alcohol (Babor *et al.*, 2003) as they are currently underregulated substances. If tobacco and alcohol were regulated according to public health principles, there would be significant changes to the current system. For example, unbranded tobacco could be sold in plain, inconvenient packaging with ingredient labeling and dominant warning labels. The concentration of nicotine could be slowly reduced to achieve specific public health goals. Pricing and taxation of alcohol could be more strategic with the goal of reducing harms.

Prohibition is defined as a law, order, or decree that forbids something. Drug prohibition criminalizes the production, possession, sales, and – in some countries – the consumption of drugs. It aims to reduce demand by disrupting drug production, supply, and distribution, and to identify consumers of illegal drugs by using law enforcement resources to prosecute and punish them. Prohibition reduces demand and consumption only if the producers, consumers, and sellers of drugs respect the law.

Many of the harms typically attributed to illegal drug consumption are due not to the drugs *per se*, but to the *prohibition* of them. Drug prohibition creates a robust black market, which makes concentrated, sometimes toxic drugs widely available and produces many health and social pathologies, including:

- Increased transmission of HIV
- Corruption of police, civic, and elected officials
- Violence
- Crime
- Destabilization of governments
- Destabilization of world markets
- Criminalization of youth
- Creation and support for organized crime groups
- Disrespect for the law.

Consequently, there is inconsistency between the declared motives of the law enforcement agencies to reduce crime and the laws themselves. This is beginning to change; in the United States, law enforcement officials are starting to challenge drug prohibition (Law Enforcement Against Prohibition, 2007).

Evidence suggests that drug prohibition is ineffective, as the amount of drug use in societies fluctuates independently of the severity of enforcement measures (MacCoun and Reuter, 2001; Nolin 2002). The continued arrest, prosecution, and incarceration of people violating the drug laws have failed to reduce the chronic, societal problem of drug abuse and its public and economic costs. Despite the increasing amounts of money being spent on prohibition, drugs have become more accessible, cheaper, and more potent through the illegal drug trade in the United States and Europe (UN Office on Drugs and Crime, 2006).

A public health approach to the individual and societal problems associated with substance use stresses the need to shift resources into research, education, prevention, and treatment as an alternative to the continued use of criminal sanctions (Geller, 1997; Tucker *et al.*, 1999; King County Bar Association, 2005). Public and population health tools can be used to examine the social determinants of health, which include the economic and social conditions that interact to influence the health of individuals and communities. Over the last century, the improvements in the health of individuals in developed countries have not been shared equally among all members of society. Illicit drug use and addiction are associated with marginalized and disadvantaged populations. To further improve the health of the population, we must reduce the health inequities between social groups (Wilkinson, 1997) and improve the social determinants of health among the most vulnerable groups.

Seeing drug use as a health issue, and not a criminal issue, allows policy makers to explore a wide range of public health tools to manage the problems in a more effective way. The social determinants of health require a focus on policies, organizations, and social structure (Sanders, 2006). The formation of the Commission on the Social Determinants of Health by the WHO in 2005 recognizes that there needs to be greater focus on these upstream determinants (Marmot, 2005).

Unintended Consequences of Prohibition

Crime and violence

The unintended consequences of prohibition have considerably negative criminal, health, and social impacts. The vast majority of the negative impacts to society stems from black market culture (e.g., organized crime and dealer disputes). Prohibition leads to wealth transfer to criminals and thus corruption. It encourages the development of a robust black market, some of which may be managed by highly cohesive, large, organized criminal groups, with spillover into seemingly legitimate businesses (Robinson, 1999; Office of the Auditor General of Canada, 2001; Sher and Marsden, 2003). The use of criminal funds to corrupt public officials, both elected and appointed, is all too common. Violence can occur because people in the drug 'industry' have wealth in highly portable forms (i.e., drugs and cash), which make them obvious targets for theft or robbery. Miron (2004) observes that violence occurs as a form of dispute resolution among people who cannot use legal channels because their disputes are occurring in an illegal industry.

The United States has more people per capita in jail than any other country, and 55% of federal prisoners are there due to drug crimes (Harrison and Beck, 2005b). However, the United States has more drug use per capita than most European countries (Hibell *et al.*, 2003). Miron found a strong correlation between the violent crime and homicide rates with drug law enforcement. He suggests eliminating drug prohibition would likely cut the homicide rate in the United States by 25–75% (Miron, 2004).

Overdose

Heroin overdose risk is directly related to its strength and purity (Brugal *et al.*, 2002; Buxton, 2005). To conceal drugs, suppliers will produce and ship the drug in the most concentrated forms (Thornton, 1998). Due to the illegal production and distribution of drugs the user is unaware of the purity and strength of the purported drug, and ignorant of other active constituents, adulterants, and diluents contained in the substance they purchase. Consequently, prohibition increases uncertainty about the product quality.

Emphasis on supply reduction and police crackdowns can result in unsafe injection practices as users inject hastily without 'tasting' their drugs to avoid police detection and therefore increase the risk of overdose. Police may force users 'underground' and away from health and other support services (Canty *et al.*, 2005).

Drug price

Prohibition may reduce the price of drugs. Although prohibition may raise supply costs as production and distribution is by illegal means, drug suppliers do not pay income or social security taxes, nor do they need to obey minimum wage laws or other labor regulations. As a result, prohibition does not appear to raise the price of drugs or reduce consumption as much as is commonly thought (Thornton, 1991).

Ethnic and racial disparities

The use and effects of drug use are not evenly distributed among different ethnic groups. Vulnerable populations have experienced the overall negative impact of drug abuse and drug prohibition more severely than the general population (Clifford, 1992). Cocaine and crack in particular affect low-income neighborhoods (Reinarman and Levine, 1997). There are disproportionate arrests and incarcerations of ethnic minorities (King County Bar Association, 2005). In the United States, African-Americans constitute 12.1% of the population (U.S. Census Bureau, 2000) but represent 47.3% of all state inmates for drug offences and 74% of all those sentenced to prison for drug possession (Harrison and Beck, 2005b). Among males aged 25–29 years, 12.6% of African-Americans are in prison or jail compared to 3.6% of Hispanics and about 1.75% of Caucasians (Harrison and Beck, 2005a). Most are poor people of color imprisoned for possessing an illicit drug or 'intending' to sell small amounts (Reinarman and Levine, 1997; Levine, 2002).

Youth involvement

An inability to enforce drug laws results in the engagement of youth with the drug culture and high-school-aged youth become a popular conduit through which drugs are distributed. It is difficult to persuade a youth who is making hundreds of dollars in an evening that he should work at a minimum-wage job. This directly contradicts the 'protect the children' arguments from those who argue for prohibition.

Harm Reduction: Philosophy and Current Initiatives

The concept of a regulated market for currently illegal drugs began with the concept of harm reduction, which is slowly becoming the accepted model of treatment in many countries around the globe (Levine, 2002). Although the harm-reduction movement stresses the freedom of individuals' and users' rights, its main incentive is to improve the population's health (Tammi and Hurme, 2007). Harm reduction is a philosophical, ethical, and pragmatic approach. It focuses on the harms resulting from substance use rather than the substance use itself. Therefore the aim is to keep people safe and minimize death, disease, and injury associated with higher risk behaviors. It does not insist on abstinence, but involves a range of nonjudgmental strategies aimed at enhancing the knowledge skills, resources, and supports for individuals,

their families, and communities to be safer and healthier (Tucker *et al.*, 1999; Denning, 2000). Tammi and Hurme reflect that:

> drug use is a normal action that inevitably occurs in modern society, and therefore users should be treated fairly as sovereign citizens and their possible problems should be tackled pragmatically and on the basis of scientific knowledge. (2007: 86)

Levine and Reinarman (2004) suggest that harm reduction in effect, though not always in intent, pushes drug policies from the more punitive forms of drug prohibition toward the more tolerant and regulated forms. The Harm Reduction Model of Controlled Drug Availability proposed by Burrows states that:

> drug policy should: have realistic goals; take into account the different patterns and types of harms caused by specific drugs; be shown to be effective or changed; separate arguments about the consequences of drug use from arguments about morals; be developed in the light of the costs of control as well as the benefits; ensure that the harms caused by the control regimes themselves do not outweigh the harms prevented by them; and recognise the existence of multiple goals, but ensure that contradictory goals are minimised. (2005: 8–9)

Harm-reduction initiatives such as needle or syringe exchange programs and methadone maintenance treatment, despite being initially controversial, are now generally accepted in many countries. Even the UN agencies that supervise worldwide drug prohibition recognize the public health benefits of harm-reduction services within current drug prohibition regimes (Levine and Reinarman, 2004). However, more recent initiatives such as supervised injection/consumption sites, heroin prescription, and distribution of crack pipes and other paraphernalia to facilitate safer crack use, have received less support and have been actively opposed by some political and enforcement agencies. The City of Vancouver, British Columbia has been largely successful in the implementation of new harm-reduction programs which were initially controversial but are now accepted and supported. It is useful to examine these programs as they begin to fundamentally challenge the utility of drug prohibition.

City of Vancouver 'four-pillar' approach and supervised injection facility

The City of Vancouver is typical of the harm-reduction movement by adopting a 'four-pillar' approach (MacPherson, 2001). This policy integrates four pillars: prevention, treatment, harm reduction, and enforcement. Each pillar should not be considered an isolated pillar, as the name implies. The Vancouver Police Department was a partner in the establishment of the Vancouver supervised injection site; the first site of its kind in North America. As the supervised injection facility (SIF) does not provide drugs on prescription, all users would enter the facility in possession of illegal drugs. This forced unprecedented discussions and cooperation between the Vancouver Police Department and health service providers. The police recognized the importance of the SIF as a harm-reduction initiative for public health benefits – such as reducing transmission of infectious diseases and overdose deaths – rather than a means to reduce criminal activity.

The SIF has been found to be effective in improving public order (Kerr *et al.*, 2006), and increases in both safer injecting practices and reduced syringe sharing have been observed (Kerr *et al.*, 2005). This service has increased use of detoxification programs and other addiction treatments (Wood *et al.*, 2006). Despite these and other positive evaluations being published in peer review literature, the SIF has been subject to nonevidence-based political pressures (McKnight, 2007).

Prescription heroin

The usefulness of opiates for controlling pain is well accepted worldwide. Hence there are regulations around opiate production, manufacture, and use that recognize the benefits and try to reduce potential harms. Prescription heroin trials were introduced in Switzerland in 1994 and in the Netherlands in 1998. Co-prescription of heroin was found to be cost effective compared to methadone alone (Dijkgraaf *et al.*, 2005), and individuals in this study showed improvements in mental and physical health (Rehm *et al.*, 2001). A randomized controlled trial of prescription heroin is currently underway in Canada, known as the North America Opiate Medication Initiative (NAOMI) in Vancouver and Montreal, the results of which will be available in 2008.

If prescribed heroin were available, drug dealers would be unable to sell this drug to opiate dependent users who would obtain the drug more cheaply on prescription. With no dealers to apprehend, police could focus their limited resources on more serious criminals. Property crime, formerly committed by users to obtain money to purchase drugs, would be reduced dramatically. The head of the British Association of Chief Police Officers suggested heroin should be prescribed to long-term addicts to prevent them from committing crimes to feed their habits (Bennetto, 2007). However, providing users with drugs would require additional funding, to distinguish recreational users from dependent individuals.

Netherlands 'coffee shops'

The cannabis policies of the Netherlands are a regulated form of *de facto* drug legalization for consumers. Coffee shops are heavily controlled business establishments where adults can purchase small quantities of soft drugs for personal use in the form of joints, pastry, drinks, and packages. Cannabis and other 'soft' drugs are available

only in small quantities. Advertising is not allowed and there is a limit on individual transactions (5 grams) and maximum stock (500 grams). Although sales appear to be completely legal, the importation and commercial production of cannabis is illegal in the Netherlands. Hence, the coffee shops are supplied by illegal importers and growers. In spite of the open availability of cannabis, the Netherlands have a lower rate of cannabis use with an average 3% regular use (17% lifetime) (Trimbos Institute, 2002), compared to U.S. 5.4% recurring use (36.9% lifetime) (U.S. Department of Health and Human Services Substance Abuse and Mental Health Services Adminstration, 2002). This addresses the fear that open availability always leads to increased consumption. Consumption patterns are influenced by many forces in society including the drug-using culture, which is very difficult to influence in the prohibitionist model.

The success of the Netherlands less punative cannabis policy has contributed to the spread of *de facto* and formal cannabis decriminalization in Spain, Switzerland, Portugal, Germany, and the UK (Reinarman *et al.*, 2004).

Compassion clubs

Medical cannabis dispensaries, also called compassion clubs, supply cannabis for therapeutic use on recommendation from a licensed health-care practitioner through Canada's Medical Marijuana Access Division established in 1999. Although communities, law enforcement, and criminal courts across Canada have shown support and tolerance for medical marijuana the legal supply of cannabis remains problematic and Canadian dispensaries are currently operating without a license (Capler and Lucas, 2006). It has been observed that allowing medical cannabis use does not increase use in the general population (Gorman, 2007).

Many industrial countries have developed policies or practices that challenge global drug prohibition. These range from official nonenforcement of cannabis laws to state-sanctioned SIFs and heroin prescription programs made possible through exemptions from the prohibition-based legal framework and not through fundamental changes of that framework (King County Bar Association, 2005). These steps are all slowly and incrementally leading to a fundamental reconsideration of drug prohibition.

Alternate Models of Drug Control

The Development of a Regulated Market Concept

It is slowly becoming recognized that harm-reduction programs are insufficient. They still exist within a prohibitionist framework, which is responsible for the creation of many of the problems that harm reduction attempts to alleviate (Health Officers Council of BC, 2005). Therefore, the debate is shifting toward development of the concept of a regulated market for all psychoactive drugs (Nolin, 2002; Health Officers Council of BC, 2005; Transform Drug Policy Foundation, 2006) including what are considered the most dangerous drugs, the smokable and injectable stimulants (Haden, 2008).

A regulated market model should be based on public health and human rights principles, which could interact to address the benefits and the problems produced by drugs and the problems produced by drug prohibition. Decriminalization or just withdrawing the legal sanctions is insufficient, as this would allow the black market to thrive. A model of regulated access needs to be developed to apply evidence-based, cost-effective models of use.

Unlike some debates regarding control of illegal drugs, there is not a strict dichotomy between prohibition and legalization (Haden, 2002). Examining the range of options through the enforcement lens leads to the observation of three models of community-based drug law enforcement (Canty *et al.*, 2005). At one end is the prohibitionist model in which police are totally dedicated to supply reduction; next is the modified supply reduction model, in which police see supply reduction as their overriding goal but acknowledge the legitimacy of harm-reduction work and try not to undermine it; and, finally, market regulation, in which police are committed to harm minimization and recognize that supply reduction is just one of a range of methods to reduce drug-related harms.

Some prohibitionists mistakenly perceive legalization as being the same as a free, uncontrolled market and that addictive psychoactive substances might be available as branded and commercial products without controls and regulations. In fact, a public-health-based regulated market could produce a more controlled market than currently exists under prohibition. For example, prohibition actively engages our youth, who then often sell to each other with no age or other controls. The Monitoring the Future report documents the high level of perceived availability of currently illegal drugs. For example, for grade 12 students in the United States, 84.9% report marijuana is 'fairly easy' or 'very easy' to obtain, 46.5% report the same for cocaine, and 52.9% report the same for amfetamines (Johnston *et al.*, 2006).

A regulated market would acknowledge that heroin, cocaine, Ecstasy, and marijuana have very different pharmacological and behavioral effects. The mode and frequency of administration may vary, and be subject to drug availability. The potential for different drugs to cause dependence and acute and chronic harms also varies widely. A regulated market would need to match the appropriate regulatory options with specific administrative and social controls for each classification of drugs. These options would be based on a benefit to harm ratio for each substance.

King County Bar Association

In 2001, a group of lawyers within the King County Bar Association in Seattle, Washington, put forward four principles to guide reform of drug control policies and practices. These principles stated that public policy should result in no more harm than the drug use itself, and it should address the underlying causes and resultant harms of drug abuse rather than discouraging drug use through criminal sanctions. It should also recognize citizens' individual liberties and the efficient use of scarce public resources (King County Bar Association Drug Policy Project, 2001).

The King County Bar Association proposed a new legal framework intended to render illegal markets of psychoactive substances unprofitable, to restrict access by young persons, and to provide health care to persons with chemical dependency and addiction. They suggest that such a framework would serve to reduce crime, improve public order, enhance public health, protect children, and use scarce public resources better than current drug policies (King County Bar Association, 2005). This framework would begin to develop the foundational principles of a new post-prohibition model.

Public Health Approaches to Drug Regulation

Haden examined ways in which drugs should be regulated (Haden, 2004). Some of the approaches or mechanisms that would be considered in a public health approach include:

Age of purchaser. There are currently restrictions to access of alcohol and tobacco based on age, but there is no control of the age when illegal drugs can be purchased. Drug dealers today do not ask their customers for age identification.

Degree of intoxication of purchaser. In Canada, the sale of alcohol is restricted based on the degree of intoxication of the purchaser. Sellers can refuse to sell to a customer whom they perceive to be engaging in high-risk, substance-using behavior.

Volume rationing. Quantities would be limited to a certain amount deemed appropriate for personal consumption.

Proof of dependence prior to purchase. Initially sales could be limited to those with addiction concerns.

Proof of 'need' to purchase. Beyond those drugs on which people are dependent, other drugs such as LSD and MDMA (Ecstasy), which have been shown to have potential psychotherapeutic benefits when used in controlled therapeutic environments, could be used with registered and trained psychiatrists and psychologists. Need can also be defined as a cultural/spiritual need, as peyote and ayahuasca (Tupper, in press) have been used by aboriginal groups in sacred traditions for centuries.

Required training for purchasers. Training programs could provide information to drug users about addiction, treatment services, and other public health issues, such as sexually transmitted diseases and bloodborne illnesses. The programs could provide the knowledge and skills aimed at discouraging drug use, reducing the amount of drug use, and reducing the harm of drug use.

Registrations of purchasers. This would allow the purchasers to be tracked for 'engagement' and health education.

Licensing of users. Like licenses for new motor vehicle drivers that restrict where and when they drive and whom they are permitted to drive with, these licenses would control time, place, and associations for new substance users. This would be a graduated program with demonstrated responsible, nonharmful drug use. The license could be given demerit points or be suspended based on infractions, such as providing substances to nonlicensed users, driving under the influence, or public intoxication. The licenses could also specify different levels of access to various substances based on levels of training and experience. People in some professions, such as airplane pilots or taxi drivers, could be restricted from obtaining licenses to purchase long-acting drugs that impair motor skills.

Proof of residency with purchase. Some societies have gone through a process of developing culturally specific social controlling mechanisms that form over time a certain amount of relatively healthy, unproblematic relationships with substances. 'Drug tourists' who have not been integrated into this culture may behave in problematic ways that do not adhere to the local restraining social practices. Therefore, purchasers may be restricted to residents of a country, state/province, city, or neighborhood.

Limitations in allowed locations for use. Alcohol is often restricted from public consumption and some public locations do not allow tobacco consumption. Locations for substance use could vary based on the potential for harm. Options of locations include supervised injection rooms for injected drugs, supervised consumption rooms for the smoking of heroin and cocaine, and home use for drugs with less potential for harm.

Administration of test prior to purchase. A short test could be administered at the distribution point to demonstrate to the staff that the purchaser has the required knowledge of safe use of the substance, which is likely to minimize harm.

Tracking of consumption habits. Registered purchasers would have the volume and frequency of purchasing tracked. This could be used to instigate health interventions by health professionals who could register their concerns with the user and offer assistance if a problem is identified. The tracking may be a deterrent to use, as well as a possible increase in price of the substance once the user has passed a certain volume threshold.

Required membership in a group prior to purchase. Drug users can belong to advocacy or union groups that

would act similarly to existing professional regulatory bodies that provide practice guidelines for their members. If the user acts outside of the norms of the discipline, the group can intervene or ultimately refuse membership. The norms are enforced through a variety of peer processes and education.

Shared responsibility between the provider and the consumer. Sellers could be partially responsible for the behaviors of the consumers. To that end, the sellers would monitor the environment where the drug is used and restrict sales based on the behavior of the consumers. Proprietors could be held responsible through fines or license revocations for automobile accidents or other socially destructive incidents for a specified period of time after the drug is consumed. The consumer would not be absolved of responsibility but a balance would be established in which the consumer and seller were both liable.

Maximum allowable limit for the consumer. A previously negotiated, maximum allowable limit for each individual could be implemented or the consumer could be allowed to put a 'stop purchase' order on themselves for a fixed period of time.

Order/delivery delay times. A delay of hours or days between time of order and product delivery may serve to reduce the incidence of out-of-control sequential use patterns.

Regulatory controls can also be targeted at sales/distribution outlets. The amount per package, formulation, and concentration of product can be specified. Examples include:

- Licensing of outlets, that is, municipalities can specify where outlets exist, hours of operation, and appearance.
- Warning posters and handout information can be available to consumers.
- A pharmacy specialist may be required to be on-site to provide information to consumers.
- Clean needles or new smoking equipment can be provided with purchase.
- Adjunctive services (i.e., withdrawal services, medical, or nursing care) may be required to be available either on-site or nearby.

Corporate restrictions include:

- Price can be controlled to initially eliminate the black market and then to generate a revenue stream for government.
- Profit controls can ensure that health and social issues always have priority over the need for corporations to maximize profitability.
- Sales can be restricted to government-run outlets only.
- Taxation levels can be specified by government.
- A percentage of the taxation can be allocated to prevention and treatment programs.
- There can be a ban of public trading of stocks for companies who sell these products.
- Advertising and sponsorship of events can be prohibited, as the intended outcome of promotion is increased consumption.

Product and packaging restrictions include:

- The design of the package can be specified. The use of color, logos, and images can be controlled.
- Governments can be responsible for all packaging.
- Warning and ingredient labels can be mandatory.
- Branding must be prohibited as allowing branding is the beginning of a process that inevitably leads to advertising, which encourages consumption. Governments would therefore have to be responsible for the packaging and sales of these products.

The Medical Health Officers Council of British Columbia proposed a policy framework for a comprehensive approach to psychoactive substances. With the overall goal to minimize harms from use, policies and programs are associated with all psychoactive substances and a realization of the benefits for individuals, families, communities, and society. The policy is based on rational and respectful discussion, and includes involving those directly affected, being explicit when policies and strategies are made without supporting evidence and encouraging pilot research (when evidence is lacking) with careful evaluation (Health Officers Council of BC, 2005).

Prohibitionist drug policy has not evolved in response to evaluation, but rather is a response to historical, moral, and political influences (Transform Drug Policy Foundation, 2006). The concept of regulated market should be explored as an evidence-based model that has the goal of reducing health and social harms from currently illegal drugs.

Critics

Critics of legalization, who assume that this means free market access, warn that the legalization of a 'soft drug' (e.g., cannabis) in an area may lead to increased sales of harder drugs (e.g., heroin). They propose that problems associated with illegal heroin use (e.g., fatalities, muggings, burglaries, use of infected needles) would rise in the area, possibly leading the authorities to conclude that the full legalization of cannabis would exacerbate the situation.

The experience of the Netherlands is significant as they have shown that openly selling a drug does not lead to societal collapse. In fact, *de facto* legalization of cannabis for consumers has been used as a tactic to separate 'soft' and 'hard' drug markets and has not lead to high rates of cannabis use. That legal sanctions are not usually correlated with consumption rates was observed in 11 American states and several jurisdictions in Australia

where decrimalization and subsequent recriminalization of cannabis neither increased nor decreased consumption rates (Single *et al.*, 2000).

Market Regulation: Controlling Drugs Not Legalization

A regulated market could be implemented to substantially reduce the illegal drug business and most of the crime, violence, and corruption associated with it (Levine and Reinarman, 2004). A regulated market with a public health and human rights orientation would also seek to substitute milder and weaker drugs and make them available in safer preparations to reduce the demand for more dangerous substances. Also, there would need to be comprehensive education about risks and benefits of the different modes of administration. An evidence-based model is needed which explores how increased availability of weaker oral solutions of some drugs can reduce the demand for more dangerous substances.

Legalizing and regulating drug production and supply would lead to a dramatic decrease in crime at all levels, as legally regulated supplies of heroin and cocaine to active addicts do not necessitate fundraising offending and would therefore have the potential to reduce property-associated crime (Transform Drug Policy Foundation, 2006).

Despite many benefits of regulating drug markets, there will be a minority of users who continue to use irresponsibly and suffer harms, and some will die as a direct result of their use. Regulation will remove the health and social problems associated with drug prohibition and the criminal markets, which encourage out-of-control use patterns. A regulated market would allow the creation of consumption facilities, which are supervised and therefore create spaces where harmful, drug-using behaviors can be directly influenced to actually reduce harm.

When drugs are purchased in the underground market they may be cut with other substances or sold under different guises to increase profit or user addiction potential. The purity and constituents are unknown. A regulated market would control for both concentration and purity of drugs.

When our society is able to move forward on the creation of a regulated market, policy makers would need to anticipate a brief period when there may be more experimentation of drugs. This can be controlled by making changes incrementally and slowly and evaluating the effects of each change. We would therefore be able to create a regulated market for all currently illegal drugs that is evidence based and actually reduces the harms created by both drugs and drug prohibition.

See also: Drugs, Illicit—Primary Prevention Strategies; Illicit Drug Trends Globally; Illicit Drug Use and the Burden of Disease.

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