

Overview: This chapter will explore how drug prohibition has failed in its objectives and has produced significant negative public health and social impacts. The concept of a regulated market for all currently illegal drugs will be explored as an evidence-based model that has the goal of reducing health and social harms from these substances. Foundational to this model is the matching of specific administrative and social controls for each classification of drugs based in the unique potential harms and benefits for each group of substances. This chapter will explore the history of the concept of a regulated market and a number of potential models that have been proposed.

INTRODUCTION

Worldwide debate continues regarding the best way to control psychoactive substances. The distinction between currently legal and illegal drugs is not based on any current 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 (MacCoun & Reuter 2001). 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 where services are provided to active drug users without requiring abstinence. 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 (Siegel 2005) 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 behaviour. 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 non-problematic use, through to problematic or harmful use, when use becomes habitual despite negative health impacts. Physical dependence may develop to some classes of drugs (BC Ministry of Health 2004).

The 2006 World Drug Report estimates that 200 million people, or 5 percent of the global population age 15-64 years have used currently illicit drugs as defined by the United Nations at least once in the last 12 months (UN Office on Drugs and Crime 2006). This

rate of drug use supports the concept that there are benefits that many users find in drug use. The majority of users are not addicts. 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, the 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 behavioural (e.g. drinking and driving) issues. Some drugs have minimal adverse behaviour changes and few toxic effects, such as marijuana (Kalant et al 1999). Other drugs are highly toxic or are associated with undesirable behaviours such as crystal methamphetamine. For an approach to the control of drugs to be evidence based, it must recognize the benefits while minimizing the harms. To respond 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 16th century were subjected to torture; and in Russia Czar Michael Federovitch executed anyone on whom tobacco was found (King County Bar Association 2005).

The United States anti-drug legislation began in the late 19th century when smoking opium was banned in opium dens in San Francisco California 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 (Murphy 1922). 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, drug stores and patients. In 1920, the Supreme Court upheld it was a violation of the Harrison Act that if a physician provided prescription narcotics for an addict, they were 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 United Nations 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 “serious evil for the individual and is fraught with social and economic danger to mankind”. US President Richard Nixon’s “War on Drugs” began in 1969. Countries throughout the world have accepted drug prohibition because of the enormous pressure from US government who continues to lead the “War on Drugs” and have found drug prohibition useful for their own purposes (Levine 2002). The United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances was adopted in 1988, which further entrenched the prohibitionist framework.

The US has the highest prison population rate in the world (Walmsley 2003). According to the US Justice Department, “while the number of offenders in each major offense 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 & Beck 2005b).

There are many parallels between drug prohibition and alcohol prohibition. Despite the prohibition of alcohol in United States coming into effect in 1920, alcohol was readily available in most of US. Beer drinking was reduced, but consumption of stronger ‘hard’ liquor increased (Levine & Reinmarman 2004). 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 advertized. 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 (Rehm et al 2006; World Health Organization 2003). Therefore an evidence-based model should also include tobacco (Borland 2003; Callard et al 2005) and alcohol (Babor et al 2003; Cook & Reuter 2007) as they are currently under-regulated substances. If tobacco and alcohol were regulated according to public health principles, there would significant changes to the current system. For example, unbranded tobacco could be sold in plain, inconvenient packaging with ingredient labeling, dominant warning labels, and the concentration of nicotine could be slowly reduced to achieve specific public health goals. Pricing and taxation of alcohol would be more strategic and would have the goal of reducing harms.

Many of the harms typically attributed to illegal drug consumption are due not to the drugs *per se* but to drug prohibition (Miron 2004). 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 (Canadian HIV/AIDS Legal Network 1999; Wharry 1999)
- Corruption of police, civic and elected officials (MacCoun & Reuter 2001; Puder 1998)

- Violence (Goldstein 1985; Miron 2001)
- Crime (Brochu 1995; Mocan & Corman 1998)
- Destabilization of governments (The Economist 1999; 2000a; 2000b)
- Destabilization of world markets (The Economist 1998)
- Criminalization of youth (Gray 2001)
- Creation and support for organized crime groups (Royal Canadian Mounted Police 2003)
- Disrespect for the law (Erickson 1980).

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 as law enforcement officials are starting to challenge drug prohibition (Law Enforcement Against Prohibition 2007).

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 by using law enforcement resources to identify consumers of illegal drugs, prosecuting and punishing them. Prohibition will reduce demand and consumption only if the producers, consumers and sellers of drugs respect the law.

Evidence suggests that drug prohibition is ineffective, as the amount of drug use in societies fluctuate independently of the severity of enforcement measures (MacCoun & 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 (King County Bar Association: Drug Policy Project 2005). 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 United States and Europe (UN Office on Drugs and Crime 2006).

A public health approach to the individual and societal problems associated with substance dependence stresses the need to shift resources into research, education, prevention and treatment as an alternative to the continued use of criminal sanctions (Geller 1997; King County Bar Association 2005; Tucker et al 1999). 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. 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 and disadvantaged groups.

Seeing drug use as a health issue 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 World Health Organization 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 considerable negative criminal, health and social impacts. The vast majority of the negative impacts to society stem from black market culture (e.g. organized crime and dealer disputes). Prohibition leads to wealth transfer to criminals and corruption. It encourages the development of a robust black market, some of which may be managed by highly cohesive, large organized criminal groups; with spill over into seemingly legitimate businesses (Office of the Auditor General of Canada 2001; Robinson 1999; Sher & 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 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 (Miron 2004).

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 & Beck 2005b), however the US has more drug use per capita than most European countries (Hibell et al 2003). Miron found a strong correlation of the violent crime and homicide rate with drug law enforcement. He suggests eliminating drug prohibition would likely cut the homicide rate in the United States by 25–75 percent (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

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 labour 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 amongst 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 neighbourhoods (Reinarman & Levine 1997). There are disproportionate arrests and incarcerations of ethnic minorities (King County Bar Association 2005). In the US, Blacks constitute 12.1% of the population (US 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 & Beck 2005b). Among males age 25-29, 12.6% of African Americans are in prison or jail compared to 3.6% of Hispanics and about 1.75% of Caucasians (Harrison & Beck 2005a). Most are poor people of colour imprisoned for possessing an illicit drug or ‘intending’ to sell small amounts (Levine; Reinarman and Levine 1997).

Youth involvement

An inability to enforce drug laws results in the engagement of youth into 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 \$100's in an evening that he should work at a minimum wage job. This is a contradiction to the "protect the children" arguments of those 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. Although the harm reduction movement stresses the freedom of individuals and users' rights, its main incentive is to improve the population's health (Tammi & 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 behaviours. It does not insist on abstinence, but involves a range of non-judgemental strategies aimed at enhancing the knowledge skills, resources and supports for individuals, their families and communities to be safer and healthier (Denning 2000; Tucker et al 1999).

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” (Tammi & Hurme 2007).

Levine (Levine & Reinmarman 2004) suggests that harm reduction in effect, though not always in intent, pushes drug policies from the more punitive forms of drug prohibition towards the more tolerant and regulated forms. The Harm Reduction Model of Controlled Drug Availability proposed by Burrows (Burrows 2005) stated 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".

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 United Nations agencies that supervise worldwide drug prohibition recognize the public health benefits of harm-reduction services within current drug prohibition regimes (Levine & Reinmarman 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 Pillars” approach and supervised injection facility

The City of Vancouver is typical of the harm reduction movement by adopting the “Four Pillars” approach (MacPherson 2001). This policy integrates prevention, treatment and harm reduction as well as enforcement. Each pillar should not be considered as isolated ‘pillars’ 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 co-operation between the Vancouver Police Department and health service providers (Haden 2006). The police recognized the importance of the SIF as a harm reduction initiative for its public health benefits such as reducing transmission of infectious diseases and overdose deaths and not as 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 non-evidence-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 October 27, 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 (Killias et al 1998). 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 US 5.4% recurring use (36.9% lifetime) (US Department of Health and Human Services. Substance Abuse and Mental Health Services Administration 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 punitive cannabis policy has contributed to the spread of *de facto* and formal cannabis decriminalization in Spain, Switzerland, Portugal, Germany, and 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 & 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, which challenge global drug prohibition. These range from official non-enforcement of cannabis laws to state sanctioned supervised injection facilities 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 the concept of a regulated market

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, which harm reduction attempts to alleviate (Health Officers Council of BC 2005). Therefore the debate is shifting toward the development of the concept of the regulated market for all psychoactive drugs (Health Officers Council of BC 2005; King County Bar Association 2005; Nolin 2002; Transform Drug Policy Foundation 2006)

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 in order 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 where police are totally dedicated to supply reduction; next is the modified supply reduction model, where 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 where 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 as in the United States as 84.9% of grade 12 students report marijuana is “fairly easy” or “very easy” to obtain and 46.5% of grade 12 students report the same for cocaine and this finding is 52.9% for amphetamines (Johnston et al 2006).

A regulated market would acknowledge that heroin, cocaine, Ecstasy and marijuana have very different pharmacological and behavioural 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 benefit: harm ratio for each substance.

King County Bar Association

In 2001, King County Bar Association 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; should recognize citizen’s individual liberties and uses scarce public resources efficiently (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 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 begins to develop the foundational principles of a new post prohibition model.

Haden

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:

1. **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.
2. **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 behaviour.
3. **Volume rationing.** Quantities would be limited to a certain amount deemed appropriate for personal consumption.
4. **Proof of dependence prior to purchase.**

5. **Proof of “need” in order 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.
6. **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 blood-borne 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.
7. **Registrations of purchasers.** This would allow the purchasers to be tracked for “engagement” and health education.
8. **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, non-harmful drug use. The license could be given demerit points or suspended based on infractions such as providing substances to non-licensed 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.
9. **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 neighbourhood.
10. **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.
11. **Need to pass a test of knowledge 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 that is likely to minimize harm.
12. **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.

13. **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 refuse membership. The norms are enforced through a variety of peer processes and education.
14. **Shared responsibility between the provider and the consumer.** Sellers could be partially responsible for the behaviours of the consumers. To that end, the sellers would monitor the environment where the drug is used and restrict sales based on the behaviour 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 where the consumer and seller were both liable.
15. **Previously negotiated maximum allowable limit for each individual** or allow an consumer to put a “stop purchase” order on themselves for a fixed period of time
16. **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 where 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 onsite 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 onsite or nearby.

Corporate restrictions:

- 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:

- The design of the package can be specified. The use of colour, logo's 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 have proposed a policy framework for a comprehensive approach to psychoactive substances. With the overall goal to minimize harms from use, policies and programs 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 where policies and strategies are made without supporting evidence and encouraging pilot research where 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 sale 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 defacto 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. The fact that legal sanctions are not usually correlated with consumption rates was observed in 11 American states and several jurisdictions in Australia where decriminalization and subsequent recriminalization of cannabis neither increased or decreased consumption rates (Single et al 2000).

Market regulation means 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 & Reinmarman 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 in order 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 fund-raising offending and have the potential to reduce property 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 (Transform Drug Policy Foundation 2006). 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 behaviours 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 there may be more experimentation of drugs. This can be controlled this 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.

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