HEALTH OFFICERS COUNCIL OF BRITISH COLUMBIA

A Public Health Approach To Drug Control in Canada

Discussion Paper
October 2005

Preface

This paper is a substantial revision of a May 5, 2004 Health Officers Council (HOC) discussion paper, "Psychoactive Drugs, Including Alcohol and Tobacco: A Public Health Approach". HOC appreciates the substantial contributions of Brian Emerson, Mark Haden, Perry Kendall, Richard Mathias, and Robert Parker to the literature review and development of this paper. David W. Pate and Kenneth Tupper provided editorial assistance. The opinions expressed herein represent the opinions of HOC and do not represent the opinions of the organizations for which the authors and members of HOC work.

Health Officers' Council of BC is a registered society in British Columbia of public health physicians who among other activities advise and advocate for public policies and programs directed to improving the health of populations.

Suggestions for improvement and feedback are welcome, and adaptation of this paper for other organization use is permitted, provided that the HOC is acknowledged and is provided with a copy of the adaptation. Contact Brian Emerson, Secretary of HOC, brian.emerson@.gov.bc.ca,
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A Public Health Approach to Drug Control in Canada

Abstract

Drug control policies could be crafted to reduce harmful use of substances, minimize negative health effects to the individual, and limit secondary drug-related harms to society. A spectrum of policy approaches exists for drug control. In Canada, tobacco and alcohol exist towards one end of the spectrum in a legal, for profit economy. Illegal drugs such as marijuana, heroin and cocaine exist towards the other end of the spectrum in a criminal-prohibition, black-market economy. The types of harms created by each of these frameworks are reviewed. We argue for a more centrist public health approach to currently illegal drugs, where policies are set to minimize harms. The balance point for determining public health policies for currently illegal drugs would be that which minimizes the prevalence of harmful use and negative health impacts, and also minimizes any indirect or collateral harms to society from regulatory sanctions. Studies support public health harm reduction strategies, but their implementation is hindered by the criminal status of drugs in popular use. Current conditions are right to enter into serious public discussions regarding the creation of a regulatory system for currently illegal drugs in Canada, with better control and reduced harms to be achieved by management in a tightly controlled system. The removal of criminal penalties for drug possession for personal use, and placement of these currently illegal substances in a tight regulatory framework, could both aid implementation of programs to assist those engaged in harmful drug use, and reduce secondary unintended drug-related harms to society that spring from a failed criminal-prohibition approach. This would move individual harmful illegal drug use from being primarily a criminal issue to being primarily a health issue. A review of Canadian reports, articles and poll results on these issues indicates a readiness to explore new approaches. A comprehensive public health approach for drug control should be adopted by the Federal, Provincial, and Municipal governments in Canada.

Recommendations

A. Reform Federal and Provincial laws and international agreements that deal with psychoactive drugs.

B. Devise pan-Canadian, public health based strategies to manage psychoactive drugs.

C. Improve capabilities to closely monitor and provide information about the health and social consequences of psychoactive drugs and drug control strategies.

D. Develop comprehensive services and a balanced investment for prevention, harm reduction, treatment, rehabilitation, and enforcement.

Outline

1. Background

Throughout human history, societies worldwide have intentionally consumed substances that alter mental functioning [1].These substances are captured broadly by the term psychoactive drugs, and are consumed for a variety of purposes. Many individuals use psychoactive drugs for their perceived personal benefits to mood, to escape or relieve psychic distress, and/or as part of a dependency process. Social communal groups may use them as part of a religious or longstanding cultural ceremonial practice. Many psychoactive drugs are also prescription medications used in the treatment of illness and disease.

The current regulatory regime in Canada places most of these individual substances in either legal (e.g. alcohol and tobacco), prescription (e.g. morphine, benzodiazepines, ritalin) or illegal (e.g. marijuana, cocaine, heroin) drug status. It is important to recognize that this taxonomy is not based in pharmacology, economic analysis or risk-benefit analysis, but is derived from historical precedent and cultural preference.

Alcohol and tobacco have a long tradition of personal use in Western European and other cultures. Their use is socially acceptable (although tobacco is becoming less so) and they remain legal for personal possession and use. The production, marketing and distribution of tobacco and alcohol are by private industry (and government for alcohol distribution in some provinces), in a regulated, for-profit commercial economy. Some regulatory limits

for the use of these two substances are in place, such as curtailing access to children with age-of-purchase rules, minimizing secondary social harms with drinking-driving legislation, and legislating smoking prohibitions in public indoor areas.

Some Health Canada approved medications have primary or secondary ("side effect") psychoactive properties. For psychoactive drugs prescribed to an individual patient, the possible benefits to the individual must outweigh the risks of any side effects in order for the physician to write the prescription. Thus, a conscious risk-benefit analysis is made by both the trained medical practitioner and the individual patient. There is a societal regulation of prescription drug supply, though some degree of illegal trafficking in prescription psychoactive drugs still occurs.

Harmful effects[A] can occur with any psychoactive drug. Harms to the individual and society will vary depending on the substance and its pharmacological effects, concentration, mode of use, circumstances of use, and ease of production. Both legal and illegal drugs vary widely in these aspects.

The direct harmful effects from the drug itself can be physical, psychological and social. For the individual, some of the physical harms could include death, toxic effects, dependency, communicable diseases, injury, violence, malnutrition, fetal damage and neurological damage. Psychological harms can include depression, psychosis, and impaired thinking. Social harms include, stigmatization, marginalization, criminalization, family breakdown, social system breakdown, lost productivity, workplace time loss, injuries and production loss, and direct health care costs.

The indirect harmful effects to society occur primarily due to two mechanisms: first the loss of fully functioning individual members due to harmful drug use; and secondly the unintended subsequent harms to society that arise from the fact that certain drugs are criminalized. Harms to society that can occur with most psychoactive drugs, both legal and illegal, include increased health and social services costs, increased criminal justice system costs, and lost productivity of workers.

Additional harms to society occur with illegal drugs. These include: marginalization of populations and loss of social cohesion; criminal activity such as theft to support drug addictions; local violence and international political instability related to the black-market drug trade; adverse economic impacts on businesses and neighbourhoods; direct enforcement costs and opportunity costs (from ever growing government enforcement expenditures that could be used elsewhere); unemployment; and limited implementation of demonstrated public health programs for drug users because of the illegal status of certain drugs. MacCoun and Reuter [2] categorize four main areas of harm due to illegal drugs:

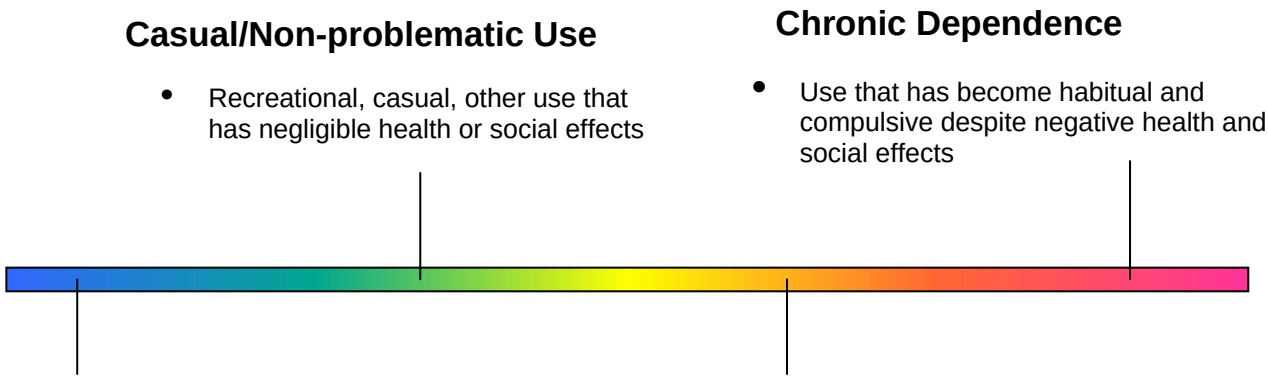
1. health
2. social and economic functioning
3. safety and public order
4. criminal justice

[A] Some authors specify that the term "harm reduction" refers to prevention of drug-related harm, as opposed to the prevention of drug use itself and its direct harmful health effect. Others use the term harm reduction to include both direct and indirect harms. One commonality is that there is no presupposition or absolute requirement on the individual to cease drug use before accessing services.

The full spectrum of psychoactive substance use ranges between benefit and harm as is shown graphically in Figure 1.

Figure 1 – Spectrum of Psychoactive Substance Use

(Adapted From: BC Ministry of Health Services. "Every Door is the Right Door: a British Columbia planning framework to address problematic substance use and addiction" 2004)



To move forward from our current regulatory regime, the Health Officers of BC propose that drug control policies should aim to reduce harmful use, minimize negative health effects to the individual, and limit secondary drug-related harms to society (e.g. crime, violence, corruption, excess medical costs). A spectrum of policy approaches exists for drug control. In Canada, tobacco and alcohol exist towards one end of the spectrum in a legal, for-profit commercial economy.

Illegal drugs such as marijuana, heroin and cocaine exist towards the other end of the spectrum in a criminal-prohibition, black-market economy. In this paper we will review the relative health and economic impacts of alcohol, tobacco and illegal drugs, and the current drug control policy frameworks in which they exist. Then we will discuss a public health approach to drug control that could prevent and reduce the harms attributable to currently illegal drugs, as well as prevent and further reduce the harms from tobacco and alcohol.

2. Terminology

In this paper, we will use terms that are overlapping, but not necessarily equivalent.

Psychoactive drugs or substances: chemicals that alter mental functioning for the effects on mood and/or with an altered state of subjective reality. This includes illegal drugs, some prescription drugs, alcohol and tobacco.

Harmful substance use: use of, and/or dependency on, psychoactive drugs that causes demonstrable harm, either for the individual or society, in terms of negative health, social or economic effects and would usually apply to such use of illegal drugs, prescription drugs or alcohol. Not usually conceptually applied as a lay term to tobacco use, although tobacco use is included in the term herein.

Illegal drugs: substances with criminal sanctions against any personal possession or use; not inclusive of prescription drugs, alcohol or tobacco. In this paper we have intentionally chosen to use "illegal" rather than "illicit" because we wish to focus specifically on the relationship between drugs and the law. "Illicit" is a broader term that includes the concepts of being improper, irregular, not sanctioned by custom, and forbidden. Thus, "illicit" can be used to describe prohibition based on cultural norms and values other than law, and suggests a moral or social as opposed to legal rationale for prohibition.

Drug control: measures to prevent and minimize use, prevalence, and harms of what are currently "illegal" drugs, though as used herein this term is meant to include all control measures, including legal measures such as regulatory approaches to legal products and/or criminal sanctions.

We have intentionally chosen not to use the terms "decriminalization" and "legalization" as they have led to much confusion. Rather we have chosen to specifically identify a range of regulatory options that could be part of public health approach.

3. A Comparison of Harms due to Illegal Drugs, Tobacco and Alcohol

The relative scope of health impacts and economic costs attributable to alcohol, tobacco and illegal drugs has recently been reviewed [3], and it is useful to consider all these substances in the same theoretical context [4]. Policy aims should attempt to achieve three common goals for all: supply management, demand reduction and harm reduction. Stockwell [4] argues that policy frameworks for all three substances should include:

1. A broad population health focus
2. Impartial evidence based priorities
3. A balanced approach considering the underlying determinants of harmful substance use as well as harm reduction strategies
4. New evaluative research methodologies
5. Legislative and regulatory structures that are not rigid, and that can adapt to evolving real-world experience and new evidence to allow an appropriate response

Single et al [5] compared the deaths and diseases caused by alcohol, tobacco and illegal drug use in Canada. They found that alcohol, tobacco, and illegal drugs accounted for 20.0% of all deaths, 22.2% of years of all potential life lost, and 9.4% of all admissions to

hospital in Canada in 1995. (Table 1). Of all substance attributable mortality, tobacco was by far the largest contributor, making up 83% of deaths, while alcohol accounted for 16% and illegal drugs only 2% respectively. The PYLL (potential years of life lost) proportions reflect the younger age profile of deaths due to illegal drugs and to alcohol-related injuries, with alcohol making up 24% of PYLL, illegal drugs 5% and tobacco 71%. By any measure tobacco is the dominant contributor to health related harms.

A report by Single [6] estimated the costs of substance abuse in Canada. It was estimated that substance abuse cost more than $18.45 billion in Canada in 1992, which represented $649 per capita, or about 2.67% of the total Gross Domestic Product.

Alcohol accounted for more than $7.5 billion in costs, or $265 per capita, representing 40.8% of the total costs of substance abuse. The largest economic costs of alcohol are $4.1 billion for lost productivity due to illness and premature death, $1.36 billion for law enforcement and $1.3 billion in direct health care costs.

Table 1
1995 Mortality and Morbidity due to Illegal Drugs, Alcohol, and Tobacco in Canada [5]

Substance	# deaths	% deaths	# admissions	% admissions	# PYLL	% PYLL
Alcohol	6,507	3.1	82,014	2.7	172,126	5.4
Tobacco	34,728	16.5	193,772	6.5	500,350	15.7
Illegal Drugs	805	0.4	6,940	0.2	33,662	1.1
TOTAL	42,040	20.0	282,726	9.4	706,138	22.2

Admissions= admissions to hospital
PYLL=potential years of life lost; the difference between age of death and life expectancy, with age and gender taken into account

Tobacco accounted for $9.56 billion in costs, or $336 per capita. This was more than half (51.8%) of the total substance abuse costs. Lost productivity due to illness and premature death accounted for more than $6.8 billion of these costs and direct health care costs due to smoking account for $2.67 billion in costs.

The economic costs of illegal drugs were estimated at $1.37 billion, or $48 per capita. The largest cost (approximately $823 million) is lost productivity due to illness and premature death, and substantial portions of these costs ($400 million) are for law enforcement. Direct health care costs due to illegal drugs are estimated at $88 million.

The larger societal economic costs due to alcohol and tobacco have been replicated in recent reviews in other countries. Collins and Lapsley [7] found costs in Australia of $34.7

Billion (AU) per annum, that were proportionally 61% due to tobacco, 22% due to alcohol, and 17% due to illegal drugs. In France in 1997, proportional costs of 41%, 53% and 6% respectively were found due to tobacco, alcohol and illegal drugs, out of a total societal cost of 218 Billion franc per year [3]. Harwood [8] found in the United States the costs in 1992 were US$148 Billion related to alcohol, and US$98 Billion related to illegal drugs. These studies were consistent in that the greater economic losses for alcohol and tobacco were due to lost productivity, whereas for illegal drugs the costs related more to enforcement.

The situation prevails through much of the world, with higher estimated disease burdens much more attributable to tobacco and alcohol than illegal drugs [9]. This, along with WHO's Global Burden of Disease in 2000 report, demonstrate the relative and significant imbalance of resource expenditure devoted internationally to illegal drug enforcement, as compared to funds allocated to reducing morbidity and mortality due to alcohol and tobacco [10].

Alcohol and tobacco have enormous health impacts on individuals and societies. In part this is due to their prevalence of use, which is due to both the pharmacology of these drugs and the fact that these products have been advertised and promoted in a legal, for-profit commercial framework. Illegal drug use also causes significant negative health impacts, but the relative scale of these health impacts is dwarfed by those attributable to tobacco and alcohol. The area where illegal drugs have disproportionately high negative costs, are those related to the enforcement of the criminal sanctions. Nolin estimated that almost $1 billion is being spent on drug enforcement in Canada every year (pg 332) [11].

4. Benefits of Drug Use

While much attention is paid to the harms of these substances, the widespread nature and persistence of use indicates that there are benefits from some substances. The Senate Committee on Illegal Drugs observed, "*We do not claim, however, to have answered the fundamental question of why people consume psychoactive substances, such as alcohol, drugs, or medication. We were indeed surprised, given the quantity of studies conducted each year on drugs, that this area has not been covered. It is almost as if the quest for answers to technical questions has caused science to lose sight of the basic issue!*" [11] A public health approach to drug control takes into account that people use substances for anticipated beneficial effects, and that population wide benefits may exist.

Anticipated beneficial effects from different drugs include:

Physical: pain relief, assistance with sleep, potential decreased risk of cardiovascular disease, increased endurance, stimulation or diminution of appetite
Psychological: relaxation, relief of stress and anxiety, increase alertness, assistance in coping with daily life, mood alteration, pleasure, performance, or creativity enhancement
Social: facilitation of social interaction, religious, spiritual or ceremonial use
Economic: wealth and job creation, industrial activity, employment, agricultural development, tax revenue generation

5.The Drug Control Policy Spectrum

A spectrum of policy approaches exists for drug control. Figures 2 and 3 attempt a graphic display of this theoretical range of drug control policies. This spectrum is divided in two, based on whether or not possession for personal use of a drug is legal or illegal. This artificial distinction is not based on health rationale, but rather extends from historical precedence.

Tobacco and alcohol policies in many countries, including Canada, exist towards one end of the spectrum in a legal, for-profit economy. Illegal drugs such as marijuana, heroin and cocaine exist towards the other end of the spectrum in a criminal-prohibition, black-market economy. This is displayed in Figure 2.

The outer boundary on the legal side of the spectrum can be conceptualized as being completely unregulated, with no attempts to control drug use. Towards the middle of the spectrum on the legal side, there would be significant and strict regulation.

At the other end of the spectrum, the outer boundary on the illegal side can be conceptualized as having the most severe criminal punishments, such as capital punishment for drug related offences. Towards the middle of the spectrum on the illegal side, there would be moderate to minimal criminal sanctions related to drug use.

Figures 2 and 3 also attempt to incorporate the parallel aspects of the intensity of:

1. regulatory restriction/criminal punishments
2. direct negative health effects/indirect drug-enforcement related harms

This is displayed by the arrows at the bottom of each Figure. As pointed out in Section 4 (above), the greatest harms related to illegal drugs arise indirectly (and counter-intuitively for some) from the enforcement of criminal sanctions around those drugs. These harms increase with increasing severity of criminal punishments. An example of this would be the jailing of drug offenders under US “three strike” legislation which has resulted in very high incarceration rates in the US compared to other jurisdictions[12].

On the legal side of the spectrum, as the intensity of regulatory restrictions increases for specific psychoactive drugs, their prevalence of use is limited, and therefore their population-level direct negative health effects are minimized. Examples of this would be the increasing regulatory constraints placed on the tobacco industry: limiting the relative potency (nicotine content) of the product, measures to limit the mass-marketing, and restricting access by children and adolescents. A greater movement to the middle of the spectrum on the legal side might include a regulatory environment where marketing and promotion of currently legal psychoactive drugs was curtailed or eliminated. Figure 3 illustrates where a public health approach to currently illegal drugs might be placed, on the spectrum with controlled possession for personal use of what would formerly be called “illegal” drugs. This schema would occur within a tightly restricted, non-commercialized environment, in order to minimize the prevalence of harmful substance use. The outer boundary on the legal side of the spectrum can be conceptualized as being completely unregulated, with no attempts to control drug use. Towards the middle of the spectrum on the legal side, there would be significant and strict regulation.

Figure 2 – Spectrum of Drug Control Approaches - Current Canadian System with individual drug possession and use primarily as a criminal issue

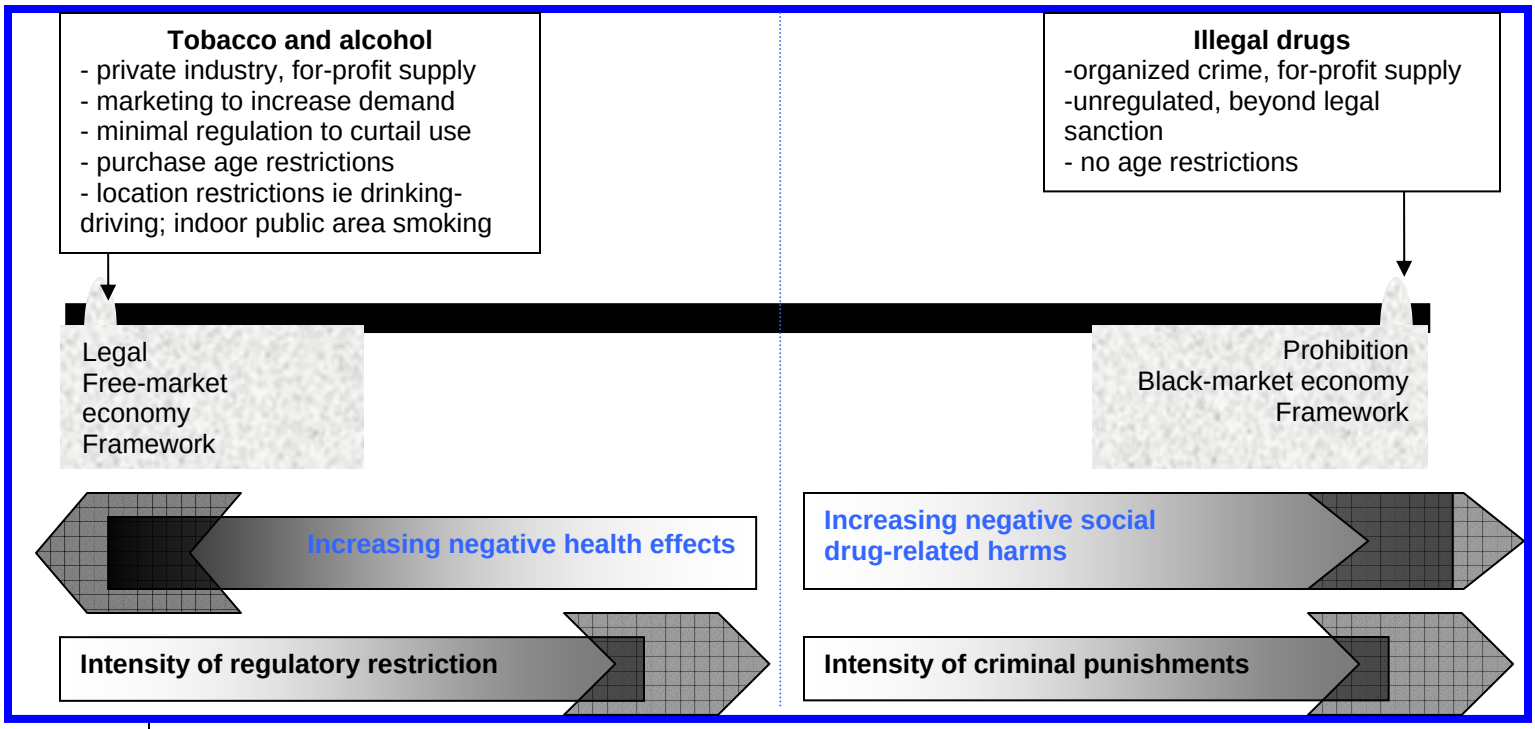
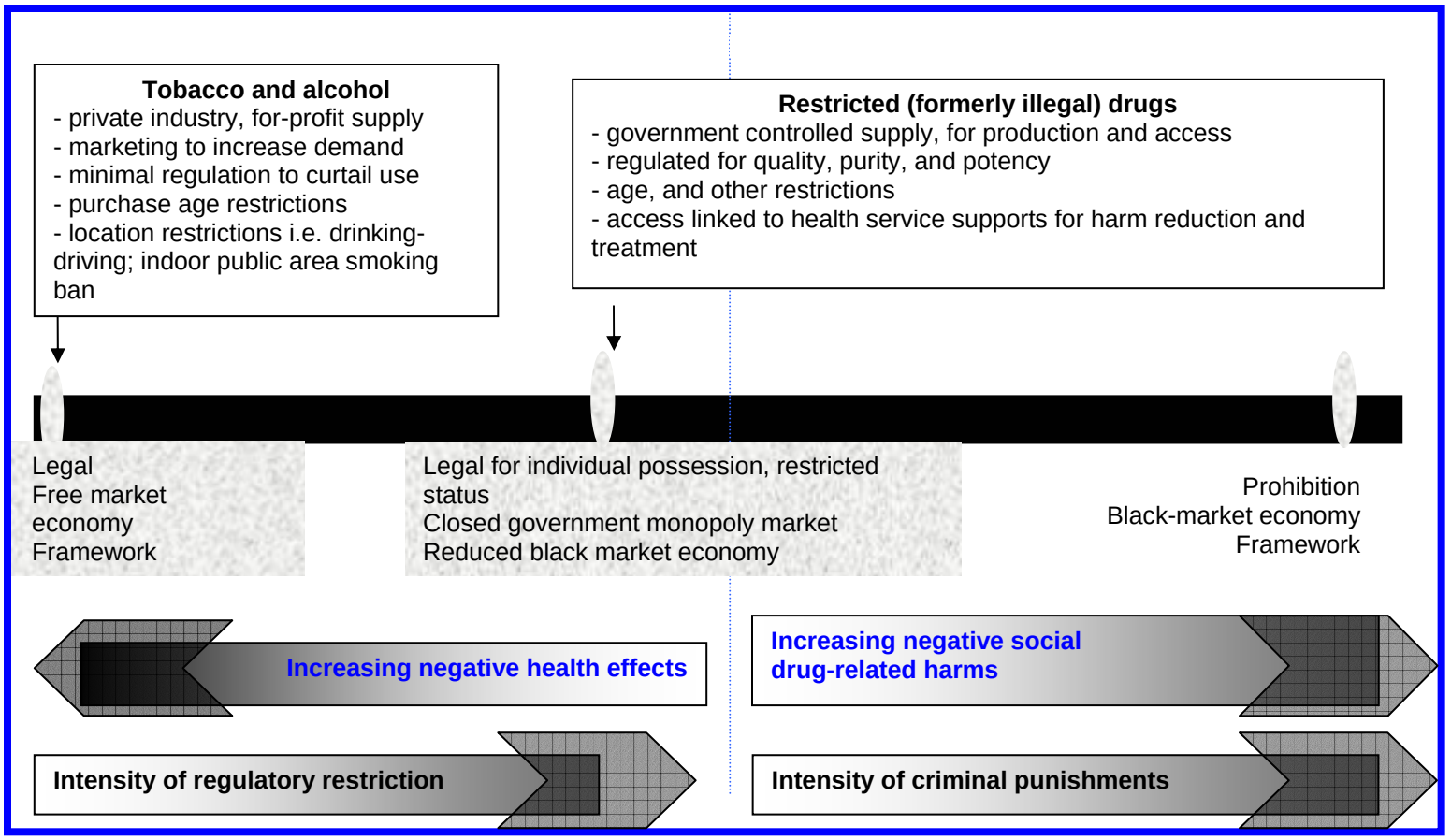


Figure 3 - Spectrum of Drug Control Approaches – Proposed System for currently illegal drugs with individual drug possession and use as primarily a health issue

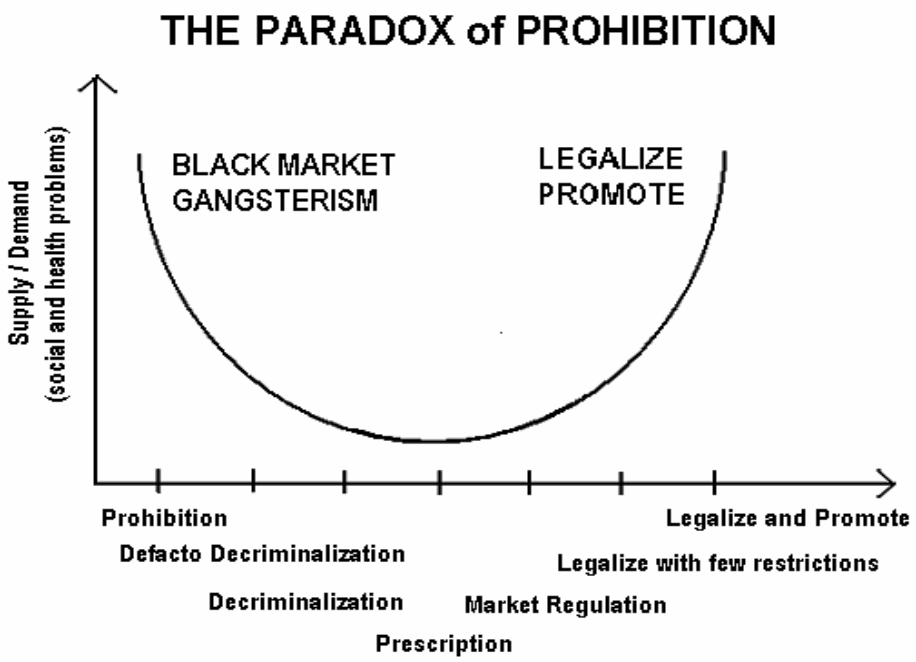


The graphical display of the spectrum of drug control approaches in Figures 2 and 3 are an extension of Marks' U-shaped curve of supply and demand. In "The Paradox of Prohibition" [13]. Marks' model shows that harms from psychoactive drugs would be minimized at a mid-point between the extremes of "legalization" and "prohibition" approaches, at the "bottom" of the U-shaped curve. Paradoxically, the harms are highest with either unfettered "legalization" or full "prohibition". Figure 4 is an adaptation of Marks' concept.

Using Marks' U curve we would predict that health and social problems associated with currently illegal drugs could be reduced with movement away from either extreme. Alcohol control policy in North America has historically swung from one extreme (prohibition) to the other (legalize and promote). Our present alcohol strategy is a mixture of promotion and attempts to control or mitigate harmful use through restrictions on advertising, server training programs, designated driver programs, prevention and public education programs, etc.

It is interesting to observe that the goal of the public health approach, which is to minimize harms, often puts public health in conflict with different interest groups whose main activity occurs at either end of the U curve. For example, large multinational corporations involved in alcohol or tobacco manufacture and marketing will oppose further controls of legal drugs, and police and justice forces will usually oppose proposals that appear to loosen access to illegal drugs (e.g. needle and syringe exchange, supervised injection sites or medical prescription of heroin). Operating at the centre of the U curve allows for the integration of public health, enforcement and corporate interests with the goal of protecting and improving the health of the public.

Figure 4 - Adapted from Marks U-Shaped Curve



In the following sections we will discuss more fully the evidence around the spectrum of approaches to drug control, and how a public health approach might lessen the harms attributable to currently illegal drugs.

6. The Drug Control Policy Spectrum: A Legal, For-Profit Commercial Economy

Tobacco and alcohol are managed in a legal, for-profit commercial economy in Canada, and in most countries worldwide. Private for-profit industry handles the manufacture, supply and distribution, with some government retail outlets for alcohol in some Canadian provinces. Tobacco and alcohol companies market their products, with some regulatory restrictions, through advertising designed to increase consumption and to gain market share. Since both alcohol and tobacco have physiological and psychological dependence forming properties, it is not surprising that tobacco and alcohol have the highest prevalence of use and cumulative negative health impacts of all the psychoactive drugs. The book "Smoke and Mirrors: The Canadian Tobacco War" documents the long history of the Canadian governments struggle to regulate the tobacco companies who have successfully resisted or delayed attempts to control them [14].

Leiberman and Borland [15] conclude that, as a substance, tobacco remains highly under-regulated in view of its propensity for its users to become dependent and its significant negative health effects. This under-regulation falls in to two main areas: marketing and product. The authors find the tobacco industry continues to actively pre-empt effective tobacco control policy, through design of products to increase their addictive effect and by using marketing strategies to maintain or increase use.

When considering the spectrum of policy options available to government for the reform of the approach to currently illegal drugs, a for-profit market economy should not be the regulatory approach that is chosen. With a legal, for-profit market approach to previously illegal drugs, a move towards private markets and minimal regulation would almost certainly create greater harms, specifically increased population health impacts from increased prevalence of use resulting from advertising and widespread availability of these products. The importance and potential magnitude of harm-increases due to small shifts in population exposures was well described by Sir Geoffrey Rose [16]. He observed the importance of population effects on the incidence of disease, and how a large number of people at small risk may give rise to more cases of disease than a small number who are at high risk. The converse of this is that small population shifts in a beneficial direction can have large overall positive impacts on the health of the population.

The large historic population exposure to tobacco (60% usage in the past) that resulted in part from a legal, for-profit market approach to this product continues to result in long-term adverse health impacts (e.g. lung cancer). Corporations necessarily have the interests of their shareholders above those of public, including better population health [17]. The public health approach therefore does not support for-profit, deregulated, free market approaches to substances with dependency promoting properties.

The potential adverse impact of freer markets is a concern. Edwards noted that "*Studies which address the availability of alcohol have usually found that when alcohol is less available, less convenient to purchase or less accessible, consumption and alcohol related problems are lower*" [18].

The very large adverse effects of alcohol and tobacco also warrant application of a more systematic public health approach to these substances. In fact, a likely criticism by those who do not understand the public health approach (or want to deflect its application exclusively to currently illegal drugs) is that public health has failed to deal adequately with alcohol and tobacco. If this criticism is leveled equally at both society and governments, as well as public health agencies, then this criticism is demonstrably valid. Avoidable harms from extremes of drug control policies (liberal and prohibition) do not cancel each other out, or argue against change. In fact, they support change and exploration and evaluation of new approaches.

In practice, the comprehensive public health approach has had a limited application to alcohol while the increasing application of this approach has had demonstrated success in substantially reducing the harms from tobacco. A more rigorous application of the public health approach could in all likelihood further reduce alcohol and tobacco related harms.

7. The Drug Control Policy Spectrum: A Criminal-Prohibition, Black-Market Economy

Our predominant response to illegal drugs in Canada is through the criminal justice system. Two recent estimates compare spending on the enforcement and health responses in this country. Single's 1996 report concluded that Canadians spend approximately $4.00 on enforcement for every $1.00 spent on treatment [19] and the federal auditor general in 2001 estimated that $95 federally are spent on enforcement for every $5 spent on treatment [20].

When any particular strategy is evaluated, both the harms and the effectiveness need to be considered. Harms can be exacerbated or originate from laws and policies that fail to take into account or ignore their unintended consequences.

It has been argued that the current criminal–prohibition policy approach to illegal drugs has generated many of these unintended consequences [2]. The "war on drugs" through enforcement of criminal sanctions has lead to:

- increased transmission of HIV and the societal burden of AIDS [21-24]
- increased transmission of Hepatitis C and consequent liver disease and cancer [24]
- corruption in civil and government sectors including the police, judiciary, and political and bureaucratic processes [23, 25-29]
- crime – personal, property, financial [23, 30-33]
- violence due to both related-criminal activity and enforcement [34-37]
- destabilization of governments [38-40]
- funding for terrorism [20] [41]
- destabilization of world markets [42]
- criminalization of youth, and otherwise non-criminal groups [43]
- family breakdown - divorce, seizure of children [44]
- disrespect for the law and judiciary [45]
- high rates of incarceration, racial profiling, and other prejudicial actions[12, 46]
- lost opportunity costs from money spent on ineffective measures

Wolfe et al. noted that this enforcement-based model for drug use continues to fuel the HIV pandemic around the world, especially in China, Russia, Thailand, Malaysia, Ukraine

and Vietnam, and blocks governments from adapting proven harm reduction strategies. Injection drug users sharing needles and equipment are a major cause of the escalating HIV rates [47]. In many countries, injection drug users account for most new HIV infections [48], and excluding Africa, injection drug use accounted for 30% of all new HIV infections worldwide by the millennium [49].

Criminal enforcement strategies do not seem to have achieved long-term reductions in either the supply or demand for illegal drugs. Some studies have observed that law enforcement does not affect the price, purity or perceived availability of illegal drugs [50] [51] [52]. In the USA, UK and Canada, drug use seems to have peaked in the 1970s, declined through the 1980s and has been on the rise since. The best one can say is that trends in illegal drug use over the past 40 years appear to operate independently of the emphasis placed on enforcement of criminal sanctions [2] [53].

It seems clear that the present policy mechanism does not achieve its stated objective [53-55], while accruing significant unintended harms. In retrospect there was little reason to believe at the outset that drug control prohibition would work. British Columbia's brief experiment with alcohol prohibition during and just after the First World War illustrates this point well. A black market economy—and corollary harms such as violence, corruption, uneven (often racist) application of enforcement and prosecution—sprang up and was quickly recognized as a bigger problem than alcohol itself [56]. The United States had a similar experience with its highly problematic Volstead Act [54] As long as it is relatively easy to produce psychoactive substances, prohibition in the absence of a widely accepted cultural norm (e.g. non-smoking Mormons) is doomed to fail. For example, as with alcohol, marijuana is the one of the easiest drugs to produce and one of most difficult of the currently illegal drugs to control. Its easy cultivation and widespread use have led to the current failure of enforcement policies to control its spread, as evidenced in our home province of British Columbia [57].

In this paper we argue that the harms attendant upon a criminal-prohibition framework for drugs are significant and the benefits modest, at best. A change in policy to a public health approach, where production and distribution can be wrestled from criminal interests and a range of effective harm reduction strategies can be implemented and evaluated, is overdue.

8. The Drug Control Policy Spectrum: A Public Health Approach

A public health approach to an issue focuses on health promotion, prevention of disease or injury, and reducing disability and premature mortality. It also incorporates individual and societal health protection measures through protecting and promoting physical environments and social policy frameworks that maximize health and minimize individual and community harms.

A public health approach to harmful substance use takes into account the fact that people use substances for anticipated beneficial effects and is attentive to the potential unintended effects of control policies, to ensure that other harms are not created out of proportion to those harms from the substance use itself.

For example, opioid substitution programs utilizing methadone have proven effective in reduction of injection practices among heroin users [58-60].

The full range of public health practice strategies [61] could be brought to bear on psychoactive substances. These would include:

Assessment: disease surveillance, needs identification, causal analysis, data collection and interpretation, case finding, monitoring and forecasting trends, research, and service outcome evaluation.

Policy development: planning, goal and objective setting; priority setting; leadership; advocating; developing healthy public policies and legislation; bringing policy options forward to those who will implement the changes; convening, negotiating, and brokering; resource allocation and mobilization; constituency building and provision of public information; encouragement of private and public sector action.

Assurance (Program and Service Delivery): ensure basic health service capacity; implementation of programs and services; crisis response; regulation of services and products; maintenance of accountability, maintenance of service levels needed to attain expected impacts or outcomes; guarantee certain health services availability; building relationships between public and private providers.

Part of a public health approach includes harm reduction. Reviews of the evidence show that selected harm reduction strategies do work [62]. Harm reduction strategies such as needle exchanges, safe injection sites and opioid substitution programs have been shown to reduce the spread of infectious diseases and the number of overdose deaths. These programs also act to draw in the otherwise marginalized drug users giving them access to health services and an opportunity to move towards risk-behavior reduction or treatment for the addiction. Harm reduction strategies have not been as effective as possible due to their implementation within the prohibition model. Post prohibition harm reduction would be able to include regulation and control substances to reduce harms to individuals, families and society as a whole.

This aspect of a public health approach involves policy change, which can include the use of regulatory tools to protect against harms and improve population health.

Haden [63] has explored the public health regulatory tools available to society in structuring a regulatory system for currently illegal drugs. Some of the possible regulatory 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 behavior.
3. **Volume rationing**. Quantities would be limited to a certain amount deemed appropriate for personal consumption.
4. **Proof of dependence prior to purchase**. Purchaser must have been assessed by a health worker to be dependent on the substance.
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 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, like 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. Program graduates would receive a certificate they would be required to show prior to purchase.
7. **Registrations of purchasers**. This would allow the purchasers to be tracked for “engagement” and health education. It might also discourage individuals from wanting to participate.
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, like 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 neighborhood.
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 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 where the consumer and seller were both liable.

Regulatory controls can also be targeted at sales/distribution outlets. Examples include:

- Licensing of outlets: 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.
- Warning and ingredient labels can be mandatory.
- Branding can be prohibited.
- The amount per package, formulation and concentration of product can be specified.

The clustering of regulatory techniques should be applied to varying degrees to different drugs, as the drugs themselves vary widely in their potential for both harm and benefit. Smokeable cocaine, cannabis, LSD, and heroin are fundamentally different groups of chemicals which have a considerable range in their potential for dependency and severity of physical, psychological and social harm. Drugs that have greater the potential for harm should be more controlled than substances which are more benign.

9. Principles of a Public Health Approach

Decision making about approaches to psychoactive drugs can become very controversial and emotional, with rhetoric and opinion often overshadowing rational and respectful discussion. This is not surprising, considering the widespread individual, family and community impacts to which these substances are linked. For this reason, it is important to engage in a process of articulation and consensus-building regarding the principles that would provide a crucial foundation for the development of a comprehensive public health approach to drugs.

Involvement of the public in the articulation of such principles will provide an understanding of the public's direction regarding these issues. A solid set of principles will provide a foundation for shaping goals, objectives, policies, and strategies for a comprehensive approach.

The first guiding principle should be "First, do no harm". This principle should be applied to all services (health, social, enforcement, etc.), as well as to new and existing policies, so as to not exacerbate problems. In addition, attention needs to be paid to the unintended consequences of existing and proposed interventions.

The Special Senate Committee on Illegal Drugs [11] suggested a number of important general guiding principles:

"Not all use is abuse" (page 592)

"...*in a free and democratic society, which recognizes fundamentally but not exclusively the rule of law as the source of normative rules and in which government must promote autonomy insofar as possible and therefore make only sparing use of the instruments of constraint, public policy on psychoactive substances must be structured around guiding principles respecting life, health, security and rights and freedoms of individuals, who, naturally and legitimately seek their own well-being and development and can recognize the presence, difference and equivalence of others*." (page 607)

"*This approach is neither one of total abdication nor an indication of abandonment but rather a vision of the role of the State and criminal law as developing and promoting but not controlling human action, and as stipulating only necessary prohibitions relating to the fundamental principle of respect for life, other persons, and harmonious community, and as supporting and assisting others, not judging and condemning difference*." (page 617)

"..*only offences involving significant direct danger to others should be matters of criminal law*."
(page 45)

Other general guiding principles for consideration include:

- Informed consent, which must be truly informed by "what a reasonable person would need to know". When applied, it allows individuals to accept risks as they see fit, when those risks do not impose risks on others to which they have not consented. When applied at the societal level, "informed consent" means that

people making decisions that affect populations do so in a truly informed manner with the best overall interests and consent of society in mind.
- Autonomy (self-determination),
- Beneficence (promote welfare)
- Utility (greatest benefit to the greatest number)
- Natural justice (fairness, equity, impartiality)

Decision-making based on these principles will help to temper influences of doctrine, righteousness, opinion, emotion, and bias from historical, social, cultural, political and industrial perspectives.

In order to stimulate further discussion, a set of more specific principles is proposed. These are a starting point, with expectation of modification through public discourse. The main point is that principles need to be established in order to guide development of a truly coherent strategy.

The following principles below are categorized according to the flow of drug control from production, through trade, to consumption; and include external influences such as promotion, policy and regulation. These are interdependent and cover the broad spectrum of rights and responsibilities and, as such, none stand alone. For example, the right to grow a plant from which a drug can be produced will be tempered by the right of the State to regulate growth, production and marketing of that plant or its products.

Growth/Production

Individuals and industry have the right to grow or produce psychoactive drugs subject to reasonable limitations.

Individuals and industry are responsible for growing or producing products of a known quality that when used appropriately will achieve the desired effects at an acceptable risk to the consumer.

Trade - Distribution/Wholesale/Prescription/Retailing

Traders are permitted to undertake activities but only within regulated parameters, bearing in mind an overall responsibility to actively prevent and reduce harmful effects.

Traders are responsible for the provision of information to consumers which leads to the reduction of individual or social harms.

Traders bear a liability for withholding information about harms or misleading consumers.

Promotion and Information

Promotion and advertising and of psychoactive drugs is not permitted for most substances, as the intended outcome of promotion is increased consumption.

If promotion is permitted for reasons of relatively low harm potential (e.g. caffeine), provision of information about different brands/products must be restricted to material differences of the product and must not be presented in such a way as to promote use.

Accurate labeling with warnings where appropriate with visually neutral packaging should be required.

Provision of factual information about the benefits and harms of specific psychoactive drugs is a responsibility of all sectors.

Consumption

Consumption of psychoactive drugs is a normal human activity, and fundamentally a personal choice, based on informed consent about the potential risks and benefits to themselves and others.

Consumers have a right to receive accurate information about drugs and their effects and a responsibility to use this information in a way that reduces the probability of harms. This includes the right to know the quality, purity and concentration of drugs they intend to take.

Governments are responsible for involving consumers in decision-making regarding psychoactive drug policies.

Citizenry

Society has the right to enjoy the benefits derived from psychoactive drugs' production, distribution, use, and regulation while being protected from harm consequent to use and dependency.

Citizens should insist that all levels of government undertake their responsibilities regarding psychoactive drugs according to their mandates.

Policy and Regulation

All levels of government (Federal, Provincial, and Municipal) are responsible for the development of policies and regulations regarding psychoactive drugs, through the entire range of policy and regulatory options that are in the best interests of individuals and communities.

Governments are responsible for controlling psychoactive drug production, packaging, distribution, promotion and use, with control measures being commensurate with the potential harms of the specific substances being regulated.

Governments are responsible for establishing taxation levels commensurate with the cost of harms to society of psychoactive drugs use.

Governments are responsible for providing consumers and communities with adequate information, services and protections to prevent and reduce the harmful effects of psychoactive drug use.

Governments are responsible for assuring that comprehensive services of prevention, treatment, and rehabilitation for problematic substance use are in place.

Governments are responsible for protecting psychoactive drug users from discrimination and legal and civil sanctions based solely on being a user of psychoactive drugs.

Governments are responsible for making regulations and providing services that are sensitive to age, gender, cultural, and religious perspectives.

Governments are responsible for establishing which offences that involve significant direct danger to others should be criminalized. These would include examples such as impaired driving offences, age restrictions for minors and specific situations where psychoactive drug use would be limited or restricted.

10. A Framework for Action on Psychoactive Drugs

A comprehensive "Framework for Action on Psychoactive Drugs" would be based on the principles outlined above and should include setting a broad goal, developing objectives, and then detailing specific strategies. Below are examples of an overall public health goal and some objectives regarding psychoactive drugs, followed by examples of specific strategies that could be employed to meet these objectives. It is also expected that specific objectives and strategies will be developed for particular drugs, including alcohol, and tobacco. Consultation with a wide range of stakeholders will be essential for obtaining suggestions, validating, and developing support for the goal, objectives, and strategies.

Proposed Goal of Framework

Minimization of the harms derived from the use, policies, and programs associated with psychoactive drugs including alcohol and tobacco, and a realization of benefits, for individuals, families, communities and society.

This goal emphasizes that harms and benefits at many different levels are associated with psychoactive drugs, and that balancing these is the aim. It also emphasizes that harms are due to policies and programs as well as from use. Finally, the goal acknowledges that realizing desired benefits from psychoactive drugs is also a component of the strategy, as that is a main reason people produce, trade, and consume these substances.

Proposed Objectives of Framework

A set of specific objectives are crucial for guiding a comprehensive strategy, and are proposed below. The King County Bar Association in Washington State released a report "Parameters of a New Legal Framework for Psychoactive Substance Control" [64]. In it they describe a proposed new state-level regulatory system to control psychoactive substances that are currently produced and distributed exclusively in illegal markets. The objectives of such measures would be to:

1. reduce crime and public disorder
2. enhance public health
3. to protect children better
4. to use scarce public resources more wisely

These objectives would be achieved by:

Education

- **A public that is educated and knowledgeable about the harms and benefits of drug use, and the harms and benefits of different drug control options.**

A significant amount of education about drugs has been proven to be ineffective [65] [66]. A post prohibition model of education will be inclusive, engaging and will provide factual information about the harms and benefits of psychoactive drug use, including the harms and benefits of current policies and strategies. This is the cornerstone to achieving a rational, holistic, ethically sound, comprehensive, effective and efficient approach, and is fundamental to all preventive strategies.

Prevention, Protection, and Health Promotion

In a post prohibition paradigm, prevention and health promotion would be crucial. Prevention programs would be based on the complex reality that problematic substance use is not solely an outcome of "bad drugs" but rather the result of many social, psychological, physical and spiritual variables that require equally complex approaches in order to prevent and reduce harms. Proposed objectives include the following:

- **Prevention of the harmful physical, psychological and social effects of drugs**

Specifically identifying the harmful physical, psychological and social effects of drugs and then targeting these for preventive measures will be essential for monitoring the effects of drugs, and demonstrating that improvements are being made.

- **Early childhood development that results in healthy, resilient children**
- **Provision of adequate support for families that nurtures children**
- **Protection of the neurological development of children and youth**

Strong support for a healthy childhood assists in child development and fosters self-esteem, prepares children to cope with the stresses of life, and helps them in making healthy decisions.
The current model of prohibition produces a black market with is very engaging of youth and makes currently illegal drugs widely available. Youth report that illegal drugs are easier to access than alcohol and tobacco [67]. A public health approach should demonstrate how young people will be protected from harms and prevent exploitation by those who profit from psychoactive drug use.

The potential for lifelong damage due to child and adolescent exposure to drugs during critical developmental stages is a serious problem and great caution must be exercised in exposing developing nervous systems to drugs.

The King County Bar Association [64] report argues that there should be restrictions on access for youth possessing and consuming psychoactive substances, but that is not being achieved in the current criminal-prohibition framework in the United States. They suggest that there is, in fact, substantial evidence that criminal punishment for youth possession and use of psychoactive substances does result in decreased use. The authors also draw distinctions between low-level peer-to-peer distribution of drugs, as compared to adult criminal network distribution. Most abstinence-based drug education programs in schools in the US were found to be ineffective. The authors believe we that we have learned from our experience with alcohol that substantive black markets do not arise when a product is legal for adults but restricted to youth.

Revenue generated from the sales of drugs could be targeted to produce specific programs that prevent or delay youth drug consumption.

- **Prevention of the harmful effects of impairment.**

People may become impaired, but should do so in a way that does not harm themselves or others.

- **Prevention of exploitation by those who profit from drugs.**

This objective encompasses strategies to deal with advertising; promotion and glamorization; provision of inexpensive drugs that encourage excessive consumption, e.g., "dollar a drink" student specials. The black-market provides easy access to cheap, potentially contaminated drugs of unknown concentration, a hazard which could be reduced or eliminated by the moving towards a regulated system of drug control.

- **Prevention of discrimination against dependent users.**

Discrimination is currently a major problem for dependent users. This results in a marginalized population, which is harmful to those individuals, their families, and society.

- **Promotion of healthy living.**

This would include improvements in health through initiatives that address the determinants of health (e.g. poverty, housing, unemployment, disempowerment) as a vital aspect of any comprehensive prevention program.

- **Allowance of use for physical or psychological benefit.**

Rather than just emphasizing the harms of psychoactive drug use, the potential benefits need to be considered.

- **Increased social and economic well-being**

A society that produces a desirable drug can reap the benefits of increased wealth, as long as the wealth generated is equitably distributed so that the society as a whole benefits, and not just a small minority.

Treatment and Rehabilitation

- **Provision of adequate services to meet the diagnostic, treatment and rehabilitative needs related to psychoactive drug use**

While prevention, protection, and health promotion are important, there still exists the need to provide adequate services for those in need. Although defining the word "adequate" is difficult, there is consensus that current service levels are inadequate. The provision of these services needs to be closely linked to the prevention initiatives, because they inform each other of the successes or failures of current strategies.

Regulation

- **Development of regulations which use the full spectrum of options (See Section 8 above for examples) and which do not result in more harms than they prevent.**

Enforcement

- **Enforcement that is directed towards those who exploit or harm others, who misrepresent the harms and benefits of psychoactive drug use, or who otherwise do not adhere to regulations as described above.**

It is vital that enforcement staff be involved in the process of change as they will continue to play a significant role in drug control. Crimes involving exploitation, force, fraud and public safety will continue to need police attention.

Strategies, Programs, and Services

A comprehensive "Framework for Action" will assist in preventing and reducing harms from drugs. However, there will still be people who will have difficulties with the use of psychoactive drugs, and there will have to be adequate, high quality accessible services and programs to assist in dealing with those problems. The following is a list of strategies (that have been adapted from Single's work) that should be employed in the development and implementation of programs and services:

- Focus on harms of psychoactive drug use, rather than psychoactive drug use per se.
- Maximize intervention options, covering demand reduction, supply reduction, and interventions directed towards individuals who use drugs. This will provide the opportunity to tailor interventions for maximal benefit. Examples include diversion from the criminal justice system, ready access to withdrawal management, safe-use programs, and providing drug substitution e.g., methadone, heroin.
- Choose appropriate outcome goals, giving priority to effective, efficient, evidenced-based programs with practical, realizable goals that maximize the utility of public resources.
- Encourage new and innovative programming, where the weight of evidence indicates that it is likely to produce a net impact of reducing psychoactive drug-related harm.
- Collaboration, partnership, networking, and inter-sectoral action are required for optimal program development and implementation.
- Employ community development to build resilient individuals and communities as the health of populations is dependent on much more than just the provision of services.
- Balance the allocation of resources with regard to geography, need, and the continuum of services, from health promotion and prevention through to early intervention, treatment, rehabilitation, and law enforcement. [5, 6].

11. Barriers to Implementation of a Public Health Approach

Many barriers exist to exploring and implementing a public health approach to drug control. Barriers include: moral arguments; concern about reduction of prohibitionist

approaches; protection of services that benefit from an enforcement focus; protection of the illegal and legal industrial activities; and government political inertia to address controversial issues in a 4-5 year election cycle.

Moral arguments are made that the use of certain drugs are inherently and ethically wrong, with a need for a prohibition of the substance and criminal punishment for its use. It accepts that the unintended harms from the criminalization of certain drugs (such as inadvertent overdoses resulting in death, and infections like as HIV, hepatitis C and hepatitis B, violence and corruption) are of secondary importance [68, 69]. Moral arguments ignore the evidence that increased spending on enforcement strategies and severity of criminal punishment has not decreased the availability of illegal drugs [70]. The fact that the criminal-prohibition approach has been unsuccessful in stopping drug supply, distribution and prevalence of use, and has resulted in many unnecessary deaths, will not necessarily dissuade a moral-imperative argument.

Religious-based political support of the dominant Republican party in US politics influences US national and international drug control policy [71]. The US government has engaged in significant lobbying efforts to block adoption of harm reduction approaches at the March 2005 meetings of the UN Commission on Narcotic Drugs [72]. The US has pressured Canada by threatening trade sanctions if Canada does not follow the "drug war" path [73-75].

Another existing barrier is the public perception that removing prohibitionist policies will lead to more problems. Research and experience from other countries indicates that removing prohibitionist policies does not automatically result in increased problems [2] [53]. It would be important to move incrementally to clearly demonstrate at each step how a public health approach would actually reduce harms.

A third barrier derives from the fact that those who benefit from existing laws will tend to support continued prohibition. Due to historical reasons, some psychoactive drugs are primarily handled through enforcement measures, while alcohol and tobacco remain legal [76] [77]. The police, judicial system workers, and the correctional system have seen much additional work, and many of their jobs were created via prohibition, and so they may argue for maintaining the status quo. Some have made the argument that the RCMP to some extent owed their existence to the fact that they have advocated for drug war [77]. However, there are those within the enforcement sector who are starting to speak out on the benefits of a regulated approach [78].

The international illegal drug industry will be powerful in its efforts to maintain the status quo. The organization behind illegal drugs will fight to maintain profits, and there will be large resources behind these efforts. This corrupting influence will not necessarily be easy to detect except that the underlying strategy will be to maintain prohibition of production, manufacture, and distribution.

As experience has shown, the legal drug industry is another barrier to a public health approach. The tobacco, alcohol, and pharmaceutical industries work very hard and invest large amounts of money in maximizing profits even when the adverse effects of their products are clearly known [14, 79].

Government political inertia to address controversial issues in a 4-5 year election cycle also stands as a barrier to exploring alternative policy options for drug control. Burrows [80]

reviewed the Australian experience over the past decade. Despite significant review and discussion at governmental levels, only limited progress was achieved in implementing any alternate public health approaches (limited medical marijuana use; supervised safe injection site in Sydney). While the concept of public health approaches continues to be discussed in Australia among professionals in the area of addictions, there is no movement in the two main national political parties to adopt these approaches into their platform or commit to legislative reform.

However in Canada we may be in a unique position to implement a public health approach to currently illegal drugs, and influence the international approach to harmful substance use as there has been a significant history that is building toward progressive change.

12. Building Momentum: Learning from History

The LeDain Commission was set up in 1969 as a Commission of Inquiry into the non-medical use of drugs. Although the commission's terms of reference included a broad range of psychotropic substances, they felt that the issues surrounding cannabis warranted detailed examination in a separate report, which they issued in 1971. They recommended that simple possession of cannabis and cultivation for personal use be permitted [81].

In 1994, BC's Chief Coroner Vince Cain, in response to an escalating epidemic of heroin drug overdoses in the downtown eastside of Vancouver, called for the elements of a public health approach to the issue of substance abuse. He expressed a need for greater research, develop better surveillance mechanisms, standards, policies, and procedures, and examine legislation, all with the aim of reducing harms due to illegal drugs. Cain observed that the criminalization and marginalization of drug users increased health and social problems and as a result advocated for heroin on prescription [82].

In a 1996 report on HIV/AIDS in prisons, the Canadian HIV/AIDS Legal Network and Canadian AIDS Society observed that "*Many of the problems raised by HIV/AIDS in prisons are the result of Canada's drug policy, which instead of providing drug users with much-needed treatment care and support, criminalizes their behaviour and puts many of them in prison. The financial and human costs of this policy are enormous*…" [46].

The "HIV/AIDS and Injection Drug Use Action Plan" in 1997 noted that "*the illegal status of drugs fosters emotion laden anti-drug attitudes toward the user, again adding to marginalization of this population, and directs action toward punishment of the "offender", rather than fostering understanding and assistance*" [83].

In a 1997, a report titled "Something to eat, a place to sleep and someone who gives a damn: HIV/AIDS and Injection Drug Use in the DTES", observed that "*The larger question is that of society's view of drug addiction, affirmed in legislation, as a criminal justice rather than a health concern. … a criminal justice view further marginalizes this population putting them further at risk*" [84].

In 1998, the Health Officers Council of BC recommended a comprehensive public health response to illegal injection drug use [85] and BC's Provincial Health Officer called for developing and implementing a comprehensive provincial substance abuse strategic plan,

to include a vision, clear goals, objectives, measurable outcomes, and intersectoral strategies for reducing substance abuse. He also recommended pilot testing of controlled legal availability of heroin and reduced incarcerations for possession of controlled substances [86].

In 1999, the Canadian HIV/AIDS Legal Network, funded by Health Canada, produced a report in which the current legal status of drugs was reviewed and the report then explored the impact of criminalization. The problems with prohibition fell under the following general categories: health, criminal, economic, and social. Alternatives to a prohibitionist drug policy were explored and it was noted that "*The most obvious (alternative) is to move completely away from criminalizing drugs and paraphernalia to regulating them by non-criminal means, using a harm reduction philosophy*." This report observed that in order of effect change both legal and ethical arguments needed to be explored [22].

In 1999, the "Red Road: Pathways to Wholeness. An Aboriginal Strategy for HIV and AIDS in B.C." report stated "*In this document, decriminalization means changing the drug laws and law enforcement policies in ways that reduce the criminal penalties faced by injection drug users. The rationale for the form of harm reduction is that criminal penalties increase the harmfulness of injection drug use by:*

- *Forcing addicts to turn to crime to obtain their drugs*
- *Increasing the likelihood that they will use unsanitary methods to inject themselves, and*
- *By stopping addicts from obtaining medical care and social services*" [87]

In 2001, the BC Addictions Task Group appointed by the Deputy Premier called for the establishment of a British Columbia Centre for the Advancement of Addiction Knowledge and Practice, and for the development of a comprehensive substance-use strategy [88].

In 2001 senior justice and health officials collaborated to produce a report titled "Reducing the Harm Associated With Injection Drug Use in Canada: Working Document for Consultation". In a substantial move away from the criminal justice approach the following principles were suggested:

- *"Injection drug use should be regarded first and foremost as a health and social issue.*
- *People who inject drugs should be treated with dignity and have their rights respected.*
- *Services should be accessible and appropriate and should involve people who inject drugs in all aspects of planning and decision making"* [89].

In 2001, the City of Vancouver displayed leadership by producing a comprehensive four pillar approach to drug problems, proposing balancing prevention, enforcement, treatment and harm reduction, with many specific recommendations [90].

The Auditor General of Canada report in 2001 expressed strong concerns with the enforcement based approach. as "…*an estimated 70 percent of criminal activity is associated with illicit drugs*" and "…*with drugs as its primary source of revenue, organized crime has intimidated police officers, judges, juries and correctional officers. Such intimidation is a direct threat to Canada's philosophy of peace, order, and good government*." The report then indicated that if Canada is to address the complicated issue of illicit drugs effectively, it needs strong leadership and co-ordination to do the following:

- implement an effective coordinating structure
- establish common objectives and a common strategy
- respond quickly to emerging issues
- ensure that collective performance expectations are stated clearly
- ensure that performance is measured and reported
- make performance information more accessible to improve Canada's efforts at reducing the use of illicit drugs
- report comprehensive performance information
- recommend changes that cross departmental lines [20]

A federal government Special Committee on Non-medical Use of Drugs called for the appointment of a Canadian Drug Commissioner, and a renewed, comprehensive, coordinated and integrated Canadian drug strategy to address the use of illicit substances and licit (or legal) substances such as alcohol, tobacco, inhalants and prescription drugs [91].

The Senate Special Committee on Illegal Drugs [11] called for leadership through the creation of a National Advisor on Psychoactive Substances and Dependency, to be created within the Privy Council Office. They recommended the adoption of an integrated policy on the risks and harmful effects of psychoactive substances covering the whole range of substances (medications, alcohol, tobacco and illegal drugs). In this report, Nolin specifically recommended a regulated market approach for cannabis and in his public presentations stated that this should apply to all drugs. They also suggested the creation of a Canadian Centre on Psychoactive Substances and Dependency, including a Monitoring Agency on Psychoactive Substances and Dependency within the centre to conduct studies on drug use trends and dependency problems. This centre would take a national leadership role in reporting on the actions taken, the key issues, research trends, monitoring, and evaluation of the national strategy on psychoactive substance and dependency.

In order to test public opinion, in 2004 a series of roundtables were carried out jointly by the Drug Strategy & Controlled Substances Program of Health Canada and the Canadian Centre on Substance Abuse (CCSA). across Canada. The participants in this process were invited to identify the most significant issues that needed to be addressed. It was noted that the list of key issues was remarkably consistent across regions. The number one issue that was identified was a "*need for a paradigm shift*". This document stated:

"*A large number if not the majority of participants felt one of the most critical factors currently limiting efforts to reduce the harms associated with substance abuse is how addictions are understood and positioned in society and in the polity as well as within the health system. For many, if not for most participants, a significant paradigm shift is needed in order to frame substance abuse as first and foremost a health and social issue rather than a criminal one, and to dedicate funds accordingly. Unless such reframing occurs, many participants felt the root causes leading to the problematic use of substances will continue to be ignored and users will continue to be blamed and discriminated against. Over and over, participants stressed the need to address the continued marginalization of addictions and to treat those with addictions with the same respect and rights as those who suffer from other diseases. "De-stigmatize addictions" was a phrase most often heard. Also heard were pleas to "humanize addictions" and to show the "personal face of addictions."*

Some participants framed the issue as one of safety, i.e., safety of individuals, families, schools, streets and communities, safety from the harms and effects of problematic substance use, safety from victimization, safety from getting HIV/AIDS, Hep-C and other diseases, and safety from crime associated with illicit drugs.

Many participants seemed to agree that a paradigm shift is required so more resources can be directed to prevention, public awareness as well as to treatment and aftercare. A number of participants went even further and maintained that for real progress to occur, the bulk of resources and energies should be applied to prevention and treatment, to addressing root causes and to implementing harm reduction practices rather than to enforcement "[92].

A recent report by the Canadian Centre on Substance Abuse stated *"Misinformed or ineffective interventions or policy can be as important as user behaviour and the contexts of use as the source of substance related harms and therefore must also be targeted for "harm reduction" interventions"(page 13) and*

"... the criminalization of illicit drug users under the current drug control legislation in Canada stands in stark opposition to the objectives of public health, and, in fact, contributes to many of the drug-related problems that harm reduction tries to alleviate. For example, the prevention of infectious disease transmission or overdose risk among IDU's is strongly hampered by the criminalization of users".(page 13)

The report concluded with *"Message 1: The field of substance abuse is evolving rapidly: we are building a comprehensive base of integrated theory and supporting research as a foundation for effective services to Canadians with substance abuse problems, and we are moving rapidly in the*
direction of drug policy that treats substance abuse as a public health issue." (page 44) [93]

Poll results also are an indicator of the public's desire for change. In an analysis of historical Canadian polls Professor Bibby documents the steady rise across Canada in support for legalization of marijuana
1975 – 26%
1980 – 29%
1985 – 30%
1990 – 24%
1995 – 31%
2000 – 47%
When broken down by region, British Columbia led the way with 56% support [94].

This was supported by a poll done by the City of Vancouver in December of 2000 which observed that support for legalization had grown from 47% to 57% in three years. This poll also noted that 61% say that they support the medical use of heroin for drug treatment [95].

Continued growth of support for change was documented in the recent Canadian Addictions Survey which asked about support for decriminalization of marijuana (15 grams or less). For Canada, 60.4% of respondents "somewhat" or "strongly" supported decriminalization, while in BC the figure was 66.5% [96].

Support across Canada for harm reduction programs was noted in a poll of 19,360 people the Globe and Mail found 61% supported safe injection sites. [97]

Media discussion of these issues began in the late 1990's and continues unabated. The Ottawa Citizen ran a lengthy 13 part series (which was reproduced in the Vancouver Sun) by Dan Gardner exploring in detail the failure of our predominant criminal justice approach [98]. On March 11, 2005 the Vancouver Sun Editorial board stated that it was the newspapers opinion that *"Canada could be a world leader in smarter drug strategies"* – this same issue had the headline *"Criminal justice on the brink of imploding".* On September 7, 2004 the National Post published an editorial titled "*Pointless Prohibition"* which stated that decriminalization would not go far enough and that it was time to legalize marijuana [99]. Media articles and editorials increasingly call into question some of the current policy approaches to illegal drugs and reflect a broadening social debate.

There is a global movement of change as many countries in Europe [100] and Australia [101] move toward perceiving drugs as a health problem. The above reports, polls and articles indicate that Canada is participating in this global change. These reflect a growing consensus that Canadians are ready for a significant change and are calling for leadership to make this happen. Canada could be a world leader in the creation of drug policies that are based on evidence and compassion.

13. Where to Go From Here – Recommendations for Action

There are calls for the Canadian government [102] [103] to follow through on its declared central objective of harm reduction as outlined in national drug strategy documents [89, 104].

In his opening message in the City of Vancouver four pillar report, Mayor Phillip Owen stated, "*The federal and provincial governments must do much more to fulfill their responsibilities with respect to drug misuse and the illegal drug trade*." A recurring theme is the increased challenge for the city to deal with such a difficult problem in the absence of strong provincial and federal leadership. The result was that Goal #1 of the report was "*Provincial and Federal Responsibility*" with a call for these levels of government to take action and responsibility for elements of the framework within their jurisdiction [90].

The Special Senate Committee on Illegal Drugs provided important general guiding principles for such a framework. It remains for the federal and provincial governments to now go forward in adopting and implementing public health approach to currently illegal drugs.

In addition to these calls for leadership and evaluation, the reports in the section above have made some very important recommendations, with limited action. It is clear that without leadership there will not be adequate action. Failure to take leadership in regards to these challenges condemns untold thousands of people to preventable deaths and illnesses, and to personal and social disruption. Leadership comes with a cost, but that cost must be viewed as an investment in what could ultimately be repaid many times over in the currency of more productive citizens and communities.

Although the political will to create the necessary leadership momentum has as of yet failed to materialize, the public is supportive of leadership on this issue as evidenced by the election in 2002 of Mayor Larry Campbell and a slate of councilors in Vancouver on a

platform that included a prominent plank regarding drug policy reform. The city of Vancouver has recognized the polarized options of prohibition and legalization as both being problematic and have suggested the need to discuss the concept of a regulated market for all currently illegal drugs as a way of preventing drug problems [105] [106]. A supervised injection site and a heroin prescription research project have been implemented in Vancouver during Mayor Campbell's time in office. Perhaps these vanguard events will pave the way for the political commitment needed to support the leadership that has been so often recommended at the provincial and national levels.

Based on our analysis, the following four actions are recommended, and need to occur concurrently as each will complement the other. These recommendations are directed at all levels of government as well as the non-government sector. Working together will be critical for success, and all players will need to fully participate for progress to be made.

A. Reform Federal and Provincial laws and international agreements that deal with psychoactive drugs

The federal government needs to take a leadership role at the national and international levels in actively initiating reform of current psychoactive drug laws, including a review and revision of the *Controlled Drugs and Substances Act*, to create regulatory frameworks for drugs that will allow governments at all levels to better address the harms associated with the production, trade, distribution, and use of these substances.

Changes at the federal and international levels will allow provinces and local governments to develop creative regulatory solutions as part of a comprehensive public health approach to psychoactive drug control.

B. Devise pan-Canadian, public health based strategies to manage psychoactive drugs.

As a new regulatory regime is being developed, the federal, provincial/territorial, and local governments must work together to devise national strategies for managing different classes of psychoactive drugs according to their potential for harm, and gather best evidence around how harms may be reduced, using both public health and human rights principles

This process will include engaging the public and stakeholders in an open and frank dialogue regarding the guiding principles, goals, objectives and strategies.

From this process we would expect a revised tobacco control strategy, a national strategy for preventing harms from alcohol, a comprehensive cannabis strategy, a variety of strategies for other currently non-prescription psychoactive substances, e.g. opioids, stimulants, hallucinogens etc., and a strategy for reducing harms from prescription psychoactive drugs.

C. Improve capabilities to closely monitor and provide information about the health and social consequences of psychoactive drugs and drug control strategies.

Accurate information on psychoactive drug use and harm trends, evidence supporting effective policies, programs and services, and ongoing evaluation and reporting on

national, provincial/territorial, and local strategies is essential. In addition, Canadians need accurate information about psychoactive drugs in order to make informed decisions about their use and potential adverse effects.

We recognize that federal bodies such as the Canadian Centre on Substance Abuse, the Canadian Institutes of Health Research, and provincial bodies such as the Centre for Addiction Research (BC), the Centre for Addiction and Mental Health (Ontario) and others are doing the best they can with current resources. However, these agencies must be adequately resourced to provide all Canadians with the information and knowledge needed to deal with the enormous problems related to psychoactive drugs. This needs to include the ability to provide accurate local information to enable and support communities to take an active role in psychoactive drug issues.

This backbone of support is necessary to be able to evaluate strategies, the impact of regulatory changes, progress, and detection of problems. It will be important that this information be current in order to revise programs in real time to achieve the stated goals and objectives.

D. Develop comprehensive services and a balanced investment for prevention, harm reduction, treatment, rehabilitation, and enforcement.

As we and others have pointed out, the health and social impacts of drugs and inappropriate responses to their management have enormous health and social consequences. There should be close examinations and tracking of federal and provincial psychoactive drug related budgets with the intention of providing resources for services that are more in line with the enormous costs, and achieving a more balanced expenditure for prevention, harm reduction, treatment, rehabilitation, and enforcement.

In addition to adequate services “on the ground”, there is the need to be able to effectively advise on, coordinate, and integrate new policy directions across government departments and between levels of government with regard to psychoactive drugs. Coordinating structures with clear responsibilities, authorities, and accountabilities for psychoactive drug issues are needed at high levels. They would deal with such matters as overseeing the development of the above-mentioned strategies, ensuring that the objectives of the strategies are satisfied; and serve as links regarding drug related issues between local, provincial/territorial, national, and international levels.

In recognition of the importance of local leadership, community action, and grassroots support to the success in public health strategies, local communities should be included and supported as key players in the development of psychoactive drug related policies, programs, and services.

14. Conclusion

The existing policy framework in Canada attempts to control certain psychoactive substances mainly through criminal legislation. These illegal drugs include marijuana, heroin, cocaine, methamphetamine, ecstasy, LSD and others. This criminal-prohibition framework exists at one extreme of the drug control spectrum.

Psychoactive drugs outside of the criminal-prohibition framework are alcohol, tobacco, and prescription drugs that exist in a legal, for-profit economy on the other end of the drug control spectrum. Alcohol and tobacco have a long history of cultural acceptance. This acceptance in part contributes to their widespread use and the negative health impacts that are demonstrably greater than those attributable to illegal drugs. For illegal drugs however, a disproportionately larger set of indirect harms to individuals and society arise from the fact of their criminalization, with the attendant black market supply and distribution.

As an alternative between these two extremes in the drug control spectrum, a public health policy framework to control currently illegal drugs would work to minimize these cumulative harms to individuals and society (Figures 1 and 2). There is a growing consensus in Canada that there should be an exploration of other drug control mechanisms, with possible adoption of strict regulatory approaches to what are currently illegal drugs. This alternative public health policy framework would exist at a new balance point in the drug control policy spectrum, occupying the middle ground. The balance point should be chosen on the basis of minimizing the multi-faceted negative effects of harmful substance use, while also minimizing the harms caused by drug laws themselves.

Given the much larger scale of negative health effects due to alcohol and tobacco, an argument can be made for moving towards the middle ground of the drug control spectrum, by adopting stricter regulatory approaches to these two substances. However, given the level of societal acceptance of alcohol and tobacco, and the power of their corporate lobbies, this will be a major challenge.

In conclusion, we argue that a comprehensive, evidence based public health approach to drug control that includes close monitoring for harms, effective education, preventive actions, health promotion and protection measures, and adequate treatment and rehabilitation services is necessary. This should include serious public discussions regarding the creation of a regulatory system for currently illegal drugs in Canada, with better control and reduced harms to be achieved by management in a tightly controlled system. The intent would be to prevent and minimize drug use and harmful health effects, and at the same time curtail the significant negative societal impacts of a black-market economy in drugs. These changes must be implemented as part of a comprehensive and integrated approach.

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