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Editorial

The *Cannabis Policy Framework* by the Centre for Addiction and Mental Health: A proposal for a public health approach to cannabis policy in Canada

Introduction

In October 2014 the Centre for Addiction and Mental Health (CAMH), Canada's largest academic health science centre devoted to mental illness and substance use (Rehm et al., 2011), released a *Cannabis Policy Framework* (CAMH, 2014). An interdisciplinary expert group from across CAMH's clinical and research (both brain science and social/epidemiological research) programs studied the evidence around cannabis-related harm, existing models of cannabis control, and public health approaches to substance use. Following nearly a year of debate, the group came to a consensus on the position outlined in the *Cannabis Policy Framework*: that legalisation, in conjunction with strict health-focused regulation, appears to be the most effective means of reducing the harms associated with cannabis use (CAMH, 2014).

CAMH's engagement in public policy development is rooted in the work of the Addiction Research Foundation (ARF), one of its four predecessor organizations (Rehm et al., 2011). In 1997 the ARF released a paper calling for a public health approach to cannabis (Addiction Research Foundation, 1997). In 2000, the newly formed Centre for Addiction and Mental Health recommended decriminalising simple possession of cannabis (CAMH, 2000); this position was reiterated between 2002 and 2008 in a series of position papers and policy submissions. In 2012, as part of its strategic planning process, CAMH began conducting a systematic review of its public policy positions, including cannabis.

By coincidence, the period in which CAMH conducted this review was one in which cannabis reforms were occurring in other jurisdictions, notably Uruguay, Colorado and Washington, and cannabis policy was becoming a politically charged topic in Canada. In July 2013, Liberal Party leader (and now Prime Minister) Justin Trudeau announced that, if elected, his party would legalise and regulate cannabis; the following month, he admitted having smoked cannabis since becoming a Member of Parliament (National Post, 2013). The ruling Conservative Party reiterated its commitment to the status quo, emphasizing its opposition to legal reform of cannabis control and widely stating that the Liberal approach to legalisation would "make buying marijuana a normal, everyday activity for young Canadians" (National Post, 2014). In mid-2014 three physicians' groups declined to join a Health Canada anti-cannabis campaign, stating that it had become "a political football on Canada's marijuana policy" (CBC News, 2014). It was into this shifting policy environment that CAMH released the *Cannabis Policy Framework* in October 2014.

Cannabis and harm

In Ontario, 14% of adults and 23% of high-school students report past-year cannabis use (Boak, Hamilton, Adlaf, & Mann, 2013; Ialomiteanu, Hamilton, Adlaf, & Mann, 2014). Among young adults aged 18 to 29, self-reported prevalence is 40% (Ialomiteanu, Adlaf, Hamilton, & Mann, 2012). Approximately 4% of the adult population and 3% of high-school students use cannabis every day (Boak et al., 2013; Health Canada, 2013), and 20% of users account for 80–90% of consumption (Room, Fischer, Hall, Lenton, & Reuter, 2010). These patterns, in which a small portion of users account for a lion's share of consumption, mirror those observed in Canada for alcohol (Thomas, 2012) and gambling (Williams & Volberg, 2013).

Cannabis use is associated with a range of harms. Use may lead to cannabis use disorders (Lopez-Quintero et al., 2011) and may cause short-term and chronic health problems (Hall & Degenhardt, 2009; Volkow et al., 2016; World Health Organization, 2016). Most important from a public health perspective apart from cannabis use disorders are traffic injuries caused by driving under the influence of cannabis, and lung cancers as a consequence of smoking cannabis (Fischer, Imtiaz, Rudzinski, & Rehm, 2016; Imtiaz et al., 2016). Youth are particularly vulnerable: there is a strong and growing body of evidence that regular cannabis use in adolescence can harm the developing brain (George & Vaccarino, 2015), possibly in a permanent way (Volkow et al., 2016). People with a personal or family history of mental illness are at increased risk of harm (McLaren, Silins, Hutchinson, Mattick, & Hall, 2009). Apart from frequent use and early initiation, important risk factors include product potency and formulation and delivery mechanism (Fischer et al., 2011).

For health-focused cannabis policy, two facts about cannabis-related harm are particularly important:

- First, the legal status of cannabis has an impact on its users, independent of the health effects. In Canada, where our approach to cannabis relies primarily on law enforcement, and cannabis possession and use are criminal offences under the *Controlled Drugs and Substances Act*, social harms of prohibition include

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exposure of cannabis users to criminality and other illegal drugs, and a criminal record for simple possession that can impact on social status, employment and travel (Erickson & Fischer, 1995). Further, cannabis possession laws tend to be applied inequitably, with marginalized and vulnerable populations disproportionately targeted (Khenti, 2014; Wortley & Owusu-Bempah, 2012).
- Second, at the levels and patterns of use reported by most adult cannabis users, the health risks are relatively modest – significantly lower than those for tobacco or alcohol (Lachenmeier & Rehm, 2015; Nutt, King, & Phillips, 2010; for a comparison for Canada: Imtiaz et al., 2016). Chronic health harms are concentrated among a limited sub-group of high-risk users who use cannabis frequently and/or began to use it at an early age (Fischer et al., 2011).

Criminalizing the use of psychoactive substances causes a variety of health and social harms without dissuading use or preventing harm (Canadian Public Health Association, 2014; Room et al., 2010). This is evident in Canada: Canadian youth rank first in cannabis use but third from last in tobacco use – even though cannabis is illegal while tobacco is legal (UNICEF Office of Research, 2013). In accessing cannabis they are exposed to illicit drug markets and culture and have little or no reliable information about the potency or quality of the cannabis they consume. While a public health approach that focuses on modifiable risk factors like age of initiation, frequency and intensity of use, consumption practices and settings, and impaired driving could have a profound impact in reducing cannabis-related harm (Fischer et al., 2011), the illegal status of cannabis makes this challenging if not impossible to implement such an approach effectively (Canadian Public Health Association, 2014).

Policy options

Uruguay and several US states have legalized recreational cannabis use or taken steps towards doing so. In Canada, calls for legal reform to cannabis control have been made since at least 1972, when the Le Dain Commission recommended repealing the prohibition of cannabis use. In the intervening decades it has only become clearer that prohibition is ineffective, costly, and constitutes poor public policy.

CAMH's previous position called for cannabis possession to be converted from a criminal offence to a civil violation, based on the assessment that the criminal justice system was an inappropriate control mechanism: that the "individual consequences of a criminal conviction, the costs of enforcement, and the limited effectiveness of the criminal control of cannabis use" are overly harmful and disproportionate to the effects of such use (CAMH, 2000, p. 2).

Upon review, the CAMH expert group found several flaws with decriminalisation. Its main theoretical benefit is the removal of the social harms of criminalisation. However:

- It may encourage the production and distribution of cannabis, without giving government any additional control tools.
- It does not address the health harms of cannabis use.
- The pattern of unequal enforcement of cannabis laws that is characteristic of many jurisdictions (including Canada) means that decriminalisation may not reverse health inequities, but rather may simply perpetuate or even increase them (Room et al., 2010).

If the optimal approach to cannabis policy is one that will tackle both the health and social harms associated with its use, decriminalisation does not qualify. Despite its advantages over the current Canadian model it is at best a half-measure.

What should be the goal of cannabis policy? Answering this question necessarily involves an element of normative judgment. In the case of CAMH, the answer has historically been that the overriding goal of cannabis policy – and for that matter drug policy in general – should be to reduce cannabis-attributable harm to individuals and society. Our goal with the *Cannabis Policy Framework* was to recommend, based on a thorough and dispassionate review of the evidence, the legal and regulatory approach most likely to effectively reduce the harms associated with cannabis use.

A public health approach to substance use treats it as a health issue – not a criminal one – using evidence-based policy and practice and placing health promotion and the prevention of death, disease, injury, and disability as its central mission (Canadian Public Health Association, 2014).

A public health approach to cannabis would involve both population-based measures and targeted interventions focused on high-risk users and practices. An illegal substance, of course, cannot be regulated. Legalisation of cannabis presents governments with the opportunity to exert control over risk factors, using regulation to reduce health harms. Legalisation is just a starting point; the key to ensuring that the effects of legalisation are positive lies in choosing the right mix of health-focused regulations and properly implementing them.

CAMH recommendations

It is important to note the parameters of our review. Legalisation in Canada would be a complex undertaking requiring changes to the federal criminal code and possibly to international drug control treaties, as well as provincial rules of implementation – but we did not make recommendations on those areas. Similarly, cannabis production was beyond the scope of the review. Rather, our focus was on policies to reduce the health and social harms of cannabis use.

There are of course few examples of legal markets for non-medical cannabis, and none of them with an evaluation of mid-term or long-term consequences. Although such markets had been established in Colorado and Washington at the time of writing, from our perspective regulations in those states were insufficiently public health-focused. The guidelines we proposed in the *Cannabis Policy Framework* were instead modeled after evidence-based alcohol and, to a lesser degree, tobacco policies.

Over the past few decades a consensus has emerged regarding effective policies and interventions to reduce alcohol-related harms: strategies to reduce harm must be coordinated and multi-sectoral, with effective controls on availability (e.g. retail location density, hours of sale) and accessibility (e.g. minimum age requirements, price levels), bans on marketing and advertisement as well as targeted education and health promotion that sensitize the public – particularly vulnerable groups – to harms and risks (Anderson et al., 2016; Babor et al., 2010; World Health Organization, 2010). The evidence also suggests that such strategies – as well as measures of quality control – are more effectively implemented and maintained where the alcohol retail system is government-run than where it is privately operated, and that jurisdictions with public monopolies on alcohol sales tend to have less alcohol-related harm relative to those with private systems (Anderson, Chisholm, & Fuhr, 2009; Babor et al., 2010; Giesbrecht, Her, Room, & Rehm, 1999). In Canada, some provinces that privatized alcohol sales in whole or in part have seen an increase in retail density, hours of sale, and sales to minors – with a concomitant increase in alcohol-related harms (Stockwell et al., 2013; Giesbrecht et al., 1999).

Based on this evidence, the *Cannabis Policy Framework* proposes a public monopoly on cannabis sales and controls on availability and

accessibility, as well as implementing interventions impacting the risk factors identified in Fischer et al., 2011, e.g. age of initiation, frequency/intensity of use, use practices and settings, and impaired driving. It offers ten principles to guide regulation of legal cannabis use. These were deliberately kept quite broad, framed as "a starting point – minimum requirements for a public health-focused regulatory framework" (CAMH, 2014, p. 12). They are reproduced here verbatim from the *Framework* (CAMH, 2014, pp. 12–13):

1) *Establish a government monopoly on sales.* Control board entities with a social responsibility mandate provide an effective means of controlling consumption and reducing harm.
2) *Set a minimum age for cannabis purchase and consumption.* Sales or supply of cannabis products to underage individuals should be penalised.
3) *Limit availability.* Place caps on retail density and limits on hours of sale.
4) *Curb demand through pricing.* Pricing policy should curb demand for cannabis while minimising the opportunity for continuation of lucrative black markets. It should also encourage use of lower-harm products over higher-harm products.
5) *Curtail higher-risk products and formulations.* This would include higher-potency formulations and products designed to appeal to youth.
6) *Prohibit marketing, advertising, and sponsorship.* Products should be sold in plain packaging with warnings about risks of use.
7) *Clearly display product information.* In particular, products should be tested and labelled for THC and CBD content.
8) Develop a comprehensive framework to address and prevent cannabis-impaired driving. Such a framework should include prevention, education, and enforcement.
9) *Enhance access to treatment and expand treatment options.* Include a spectrum of options from brief interventions for at-risk users to more intensive interventions.
10) *Invest in education and prevention.* Both general (e.g. to promote lower-risk cannabis use guidelines) and targeted (e.g. to raise awareness of the risks to specific groups, such as adolescents or people with a personal or family history of mental illness) initiatives are needed.

The *Framework* notes that in order for legalisation to result in a net benefit to public health and safety, any government reforming Canada's system of cannabis control must commit to public health and safety as the primary and overriding imperative, establish measurable indicators, build in the capacity and flexibility to adjust as needed based on the measured impact of reforms, and protect the resulting regulatory framework from commercial and fiscal interests (both private and public). The next steps would be operationalization of these principles and concrete implementation. For example, a comprehensive framework on impaired driving will need to include a per se law on driving under the influence of cannabis as well as guidelines for its enforcement via sobriety checkpoints or random testing (World Health Organization, 2015). Similarly, operationalizing the curtailing of high-risk formulations will involve concrete recommendations to avoid mixing cannabis with tobacco as well as other recommendations along the lines of the lower-risk guidelines for cannabis use (Fischer et al., 2011).

Conclusion

CAMH's review of the evidence led to the conclusion that legalisation is a necessary – but not a sufficient – condition for reducing health and social harms associated with cannabis use. Some people will use cannabis regardless of its legal status, and a significant advantage of legalisation is that it creates the opportunity for more control over the risk factors associated with cannabis-related harm through a public health approach to regulation.

Conflict of interest

The authors declare to have no conflict of interest.

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