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Article

Harm reduction and polymorphic models of cannabis regulation in Canada

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Abstract

Cannabis policy is evolving around the world. While cannabis legalization is perhaps inevitable, responsible regulation is not. Canada provides a unique case study. This paper explores five regulatory models that guide contemporary cannabis policy, organized around public safety, public health, medicinal and therapeutic models, commerce, and racial justice. First, we assess each by focusing on fundamental assumptions, operational goals, and practical outcomes. Next, we consider the impacts of each of these models by exploring significant categories of cannabis policy-based harm. Third, we attempt to reconcile tensions between commerce and control, liberty and safety, and justice and fairness. By re-aligning regulatory cannabis models, we focus on access, equity, and tolerance, re-conceiving public safety, and explicitly committing to consent as central to cannabis diversion programs. Finally, in place of singular governance models, we propose several intermediate polymorphic policy reforms to inform this re-alignment.

Résumé

La politique du cannabis évolue dans le monde entier. Bien que la légalisation du cannabis soit peut-être inévitable, une réglementation responsable ne l'est pas. Le Canada fournit une étude de cas unique. Cet article explore cinq modèles réglementaires qui guident la politique contemporaine du cannabis, organisés autour de la sécurité publique, de la santé publique, des modèles médicaux et thérapeutiques, du commerce et de la justice raciale. Tout d'abord, nous évaluons chacun en nous concentrant sur les hypothèses fondamentales, les objectifs opérationnels et les résultats pratiques. Ensuite, nous examinons les impacts de chacun de ces modèles en explorant des catégories significatives de préjudices basés sur la politique du cannabis. Troisièmement, nous tentons de concilier les tensions entre commerce et contrôle, liberté et sécurité et justice et équité. En réalignent les modèles réglementaires du cannabis, nous mettons l'accent sur l'accès, l'équité et la tolérance, en reconsidérant la sécurité publique et en nous engageant explicitement à placer le consentement au cœur des programmes de diversion du cannabis. Enfin, au lieu de modèles de gouvernance singuliers, nous proposons plusieurs réformes politiques polymorphes intermédiaires pour informer ce ré-alignement.

Keywords: Cannabis; Legalization; Governance; Canada

Mots-clés: Cannabis; Légalisation; Gouvernance; Canada

Introduction

In 2018, Canada became the second country, after Uruguay, to formally legalize the cultivation, possession, and consumption of cannabis and its by-products. In 2022, the federal government in Canada launched a statutory review of the Cannabis Act[1] to determine whether the legislation was meeting “Canadians' needs and expectations.” The review focused on the law's impact on Indigenous people, home cultivation, and young people's health and consumption patterns. Minister of Mental Health and Addictions Carolyn Bennett stated:

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> While a lot of progress has been made on the implementation of the Cannabis Act and its dual objectives of protecting public health and maintaining public safety, we need to assess the work that has been done and learn how and where to adjust to meet these goals.[2]

One way to start any re-assessment is to recognize the conceptual challenges associated with cannabis policies that blend public safety and public health. Too often, this allows the carceral state to continue "…to cast its shadow" (Aaronson & Rothschild-Elyassi, 2021: 3) over cannabis and those who use it.

Canada serves as a case study for what we have called the moral, legal, and cultural renegotiation underway on cannabis around the world (Wheeldon & Heidt, 2022). This re-ordering is based on the recognition of cannabis' relative safety (D'Souza et al., 2022) and a reconsideration of contemporary international legal regimes that limit cannabis reform (Eliason & Howse, 2019). To date, cannabis policies in Canada do little to combat a history of disparate adverse impacts on Black, Indigenous, and other People of Color (BIPOC) (Wiese et al., 2023). Indeed, opposition to cannabis reform remains obstinate.[3] Even as the Liberal government began the process of reviewing the *Cannabis Act*, they continued to frame legalization as a matter of public health and safety rather than of social justice, human rights, liberty, or welfare.

While cannabis legalization is perhaps inevitable, responsible regulation is not. In Canada, emphasizing public health goals ahead of market conditions initially undermined legal cannabis as an industry (Wesley & Murray, 2021) in part by complicating efforts to disrupt illicit cannabis, which remains less costly and more potent (Mahamad et al., 2020). While promoting adaptive strategies to limit cannabis access conforms to some public health goals (Aaronson & Rothschild-Elyassi, 2021), it stigmatizes use (Newhart & Dolphin, 2019) and furthers "messaging that is predominantly infused with traditional risk-based rhetoric about cannabis" (Watson et al. 2019: 474). This approach cannot support the development of a culture of responsibility to guide cannabis use (Sifaneck & Kaplan, 1995).

This paper explores five regulatory models that guide contemporary cannabis policy. These include the public safety model (Fischer et al., 2021), the public health model (Wesley & Murray, 2021), the medicinal model (Newhart & Dolphin, 2019), the commercial model (Mahamad et al., 2020), and an emergent racial justice model (Mize, 2020). We assess these models by focusing on fundamental assumptions, operational goals, and practical outcomes.

Next, we consider the impacts of these models by exploring significant categories of cannabis policy-based harm (Wilkins et al., 2022). Instead of singular or monomorphic models of cannabis regulation, we present three blended models based on a polymorphic approach, whereby cannabis policy can embrace more than one governance model (Aaronson & Rothschild-Elyassi, 2021). We conclude by reconciling some of the tensions between commerce and control, liberty and safety, and justice and fairness.

Governing Cannabis: Regulatory Frameworks, Models, and Policies

Regulatory frameworks and models guide policies and practices.

A traditional means to assess regulation frames these models as competing with other regulatory approaches for governing influence within a jurisdiction (Dunleavy & O'Leary, 1987). Assessing regulatory models often proceeds by examining distinct characteristics associated with stated goals, approaches to legitimacy, and policy instruments (Majone,

1994). Of continuing interest is research on the role of credibility and agency independence within regulatory
environments and the relationship between regulatory policies and their outcomes (Alon-Barkat & Busuioc, 2024; Guidi et al., 2020). This means considering structural factors, such as how underlying assumptions influence regulatory choices, as well as documenting how these regulatory priorities impact short-term outputs and longer-term outcomes. The models that follow build on early approaches to cannabis policies (Caulkins et al., 2016; Pacula & Sevigny, 2014) and more recent efforts designed to frame cannabis regulation in post-prohibition terms (Corva & Meisel, 2021; Seddon & Floodgate, 2020).

Cannabis and Public Safety

Despite evidence to the contrary (Callaghan et al., 2021; Lu et al., 2021), cannabis liberalization remains constrained by the assumption that it is connected to crime. Fischer and colleagues (2021) consider five areas of cannabis-related research based on these concerns. They include the deterrent effect of prohibition; illicit production, markets, and supply in a legalization regime; use enforcement; cannabis-impaired driving; cannabis and crime. As we have observed elsewhere, the fact that cannabis prohibition has existed for a century means that for most of our lives, simply possessing cannabis meant one was engaging in criminal behavior (Heidt & Wheeldon, 2023: 92-93). These assumptions lead to operational goals that embrace the criminal justice system as the primary response to cannabis use. This is despite the recognition that the enforcement of cannabis prohibitions has long been costly (Kaplan, 1970), racist (Mize, 2020), and driven by ideology (Ritter, 2021).

In practice, adopting this model results in over-policing, problematic arrests, and punitive sentences (Vitiello, 2021). Based on an analysis of cannabis arrest data before cannabis was legalized in five Canadian cities, racial differences were found in the rates of cannabis arrests for Black and Indigenous people (Owusu-Bempah & Luscombe, 2021).[4] Even since cannabis legalization, possessing any illegal cannabis or more than 30 grams of licit cannabis is theoretically punishable by years in prison in Canada. Another area of concern is cannabis-impaired driving. While mixing cannabis and alcohol represents safety risks on the road, enforcement efforts have outpaced the evidence base about the dangers of cannabis use alone (Pearlson et al., 2021). Nevertheless, in Canada, public safety concerns have led researchers to develop public health-informed recommendations for clinicians counseling younger drivers about cannabis use and driving even in the absence of credible data (Brubacher et al., 2020).

Cannabis and Public Health

Public health models assume cannabis use represents a serious risk to individual health and societal well-being (Heidt & Wheeldon, 2023: 94-95). This assumption can be traced to references to insanity and addiction during early international drug control meetings in the 1920s.[5] This association served political ends and spread through the U.S.-based Reefer Madness era of the 1930s (Wheeldon & Heidt, 2023a). By 1969, a “global drug prohibition regime” emerged that limited cannabis research and focused solely on the harmful effects of cannabis (Newhart & Dolphin, 2019: 57-65). Since the 1990s, the Brain Disease Model of Addiction (BDMA) has served as the primary justification for global drug policy (Volkow & Li, 2005). Based on early work by Alan Leshner (1997), this model is connected to the much-

maligned "gateway theory" of drug use.[6] Operationally, viewing cannabis use as a risk to public health is consistent with other strategies to limit behaviors like gambling or consuming alcohol (Wesley & Murray, 2021). It relies on a specific definition of public health.

While some contemporary public health imperatives attempt to limit cannabis consumption, harm reduction was a key focus of the first decriminalized cannabis policy in the Netherlands (Sifaneck & Kaplan, 1995). Since then, more than thirty countries have implemented models of drug decriminalization based on public health interventions (Eastwood et al., 2016). Ideally, diversion programs steer individuals away from punitive sanctions and toward educational, therapeutic, or social support services (Stevens et al., 2021: 31). In practice, drug treatment programs are often administered within the criminal justice system. In the place of principles like empowerment, autonomy, and dignity, these programs rely on coercion, exaggeration, and intimidation (Klag et al., 2005; Luciano et al., 2014; Werb et al., 2016). In Canada, the public health narratives surrounding cannabis usually emphasize complete abstinence or focus on individual-level risks and harms. This messaging often fails to resonate with the experiences of many young people who use cannabis (Watson et al., 2019: 472).

Cannabis as Medicine

Recognizing the medicinal benefits of cannabis is hardly new (Booth, 2003; Seddon & Floodgate, 2020). In the 1800s, physicians in Britain and the U.S. used cannabis as a sedative and anticonvulsant.[7] At one time, it was a popular ingredient in numerous patented medicines (Hand et al., 2016). Medicinal cannabis reappeared in the U.S. in the 1970s during a brief period of state-based cannabis liberalization (Dufton, 2017). The assumption that cannabis can be therapeutic complicated public health models, which described cannabis as a menace (Heidt & Wheeldon, 2023: 95-96). California became the first state to authorize the medicinal use of cannabis in 1996, following the patient-led statewide Proposition 215 in 1996. The acceptance of medicinal cannabis further destigmatized use (Nussbaum et al., 2015). By July 2018, forty-six states, the District of Columbia, and the U.S. territories of Puerto Rico and Guam provided for the legal therapeutic use of cannabis. In addition, thirty-four states have programs currently serving patients, and seventeen states have programs that allow limited access (Mize, 2020: 3).

Operationally, medicinal cannabis has been federally legal in Canada since 1999 (Bennett, 2021: 192). However, early regulations made access to medicinal cannabis difficult, limiting its use by patients. The federal government has determined it must provide reasonable access to a legal source of cannabis for medically sanctioned purposes.[8] Accessing medicinal cannabis, however, remains uneven (Valleriani et al., 2020). Although the number of registered patients in Canada increased from 8000 patients in 2014 to 235 000 in 2018,[9] the number of individuals enrolled in the medical cannabis access program is a small percentage of total cannabis users (Grootendorst & Ranjithan, 2019). This may be related to the practical process required. Patients must first obtain a document from their physician or nurse practitioner, who may be skeptical of cannabis' medicinal value (Ng et al., 2022). Next, they must register with Health Canada to connect with a licensed cannabis producer, be approved to grow their own or designate someone else to produce it for them.[10]

Cannabis as Consumer Good

Cannabis as a consumer good assumes that there is no legitimate reason to constrain responsible consumption by adults (Heidt & Wheeldon, 2023: 96-97). In the U.S., commercial cannabis first appeared through the cannabis paraphernalia market. This market included pipes, bongs, rolling papers, and drug-oriented magazines, which by 1977 "…[were] generating $250 million a year" (Dufton, 2017: 73). In the 1980s in the Netherlands, coffeeshop culture emerged (Sifaneck & Kaplan, 1995). Recently, this consumer culture has been extended through cannabis-seed businesses that promise home growers access to popular and award-winning strains.[11] The global cannabis market has been estimated at $US 20 billion in 2021 and is projected to reach 128 billion (US) by 2030.[12] Global cannabis consumer culture is growing even in jurisdictions guided by punitive cannabis legislation and conservative social policies (Wanke et al., 2022).

Operationally, consumer cannabis is driven in part by the potential for tax revenues (Kavousi et al., 2022). Estimates suggest U.S. states could capture between $10 to $450 million annually in excise revenues if they legalize cannabis (Boesen, 2021). In the province of B.C., as of May 2022, the province had received $112.74 million in federal excise duty payments — $30 million in the first four months of 2022 alone. Some cannabis businesses are developing more specialized strains of cannabis to encourage creativity, energy, intimacy, or relaxation,[13] and cannabis tourism as an industry is emerging (Keul & Eisenhauer, 2019; Liu & Stronczak, 2022). Practically, in Canada, some cannabis producers are using place names in their products to target consumers,[14] and others are engaging in marketing by another name. In a recent advertising campaign, *Stok'd Cannabis*, a Toronto cannabis store, funded advertising for a neighboring bookstore, nail salon, and hardware business. Each ad references cannabis culture and concludes with a shot of the storefront, indicating that these businesses are conveniently located near a local cannabis store.[15]

Cannabis and Racial Justice

As cannabis liberalization has emerged, so too have calls to address the persistent role of racism within cannabis policy (Heidt & Wheeldon, 2023: 97-98). As Bender (2016: 690) noted in a review of the early years of cannabis liberalization in the U.S., race and cannabis prohibition have been linked by:

> …the initial criminalization of marijuana rooted in racial stereotypes, the enforcement of that prohibition throughout the twentieth century to the present day by means of racial profiling... [and] continues to disproportionately impose serious consequences on racial minorities, while white entrepreneurs and white users enjoy the early fruits of legalization.

The model assumes that laws were and often remain structured to maintain White privilege (Delgado & Stefancic, 2007). Specific to cannabis, adopting a racial lens to policy reform requires considering "…who benefits and [who] is burdened by reform" (Crawford, 2021: 459). Operationally, a racial justice model of cannabis regulation would embrace social equity programs, criminal record relief, and community reinvestment (Mize, 2020: 22-28). In practice, these priorities have been difficult to attain.

In the U.S., the Biden administration has embraced some reforms designed to liberalize cannabis policy.[16] Federally, *The Marijuana Opportunity Reinvestment and Expungement Act* (MORE Act) would decriminalize cannabis and expunge nonviolent federal marijuana

convictions.[17] Various other approaches are being considered at the state and municipal levels. This includes understanding how social equity licensing can be leveraged to expand diversity within the legal cannabis space. In Canada, this means contending with the legacy of cannabis prohibition for racialized individuals (Fataah et al., 2023), as well as the federal and provincial legacy toward Indigenous and First Nations communities, including insufficient engagement on what the Cannabis Act would mean for Indigenous communities (Koutouki & Lofts, 2019). An emergent challenge is efforts to establish cannabis businesses on reserves, often outside federal and provincial regulation, which pits the interests of racial and ethnic justice against those of regulated commercial cannabis businesses.[18]

Reducing Harm: Models, Definitions, and Policy Criteria

Harm reduction can be described as a pragmatic and compassionate set of strategies designed to reduce the harms associated with behaviors that are seen as potentially risky (Marlatt, 1999). This may include policies, programs, or practices that aim to minimize adverse health, social, and legal impacts associated with illicit drug use. While it defies a standard or singular definition, *Harm Reduction International* (HRI) provides a helpful clarification. They state:

> Harm reduction is grounded in justice and human rights – it focuses on positive change and on working with people without judgement, coercion, discrimination, or requiring that they stop using drugs as a precondition of support.[19]

An incomplete list of harm reduction includes making condoms freely available, naloxone distribution programs, drug testing programs, and the provision of safe drug supplies.[20]

Some definitions of harm reduction consider abstinence-based policies and practices to be consistent with the goals of harm reduction (Lenton & Single, 1998). While some suggest that harm reduction and being "tough on drugs" need not be mutually exclusive (Nutt, 2012), we reject this view, especially as applied to cannabis. Abstinence programming tends to proceed by emphasizing risk-based messaging (Watson et al., 2019) that stigmatizes people (Goffman, 1963) while failing to provide them with helpful information (Parker & Egginton, 2002). By contrast, harm reduction in healthcare settings focuses on humanism, pragmatism, individualism, autonomy, incrementalism, and accountability without termination (Hawk et al., 2017: 70). In the context of drug policy, this requires understanding the physical, psychological, and social harms of using various illicit substances (Nutt et al., 2010).

Given the growing international interest in cannabis reform, some researchers have engaged stakeholder experts to rank cannabis law reform options based on social, economic, political, health, and criminal justice impacts (Wilkins et al., 2022). This work was based on earlier efforts to quantify and compare the risks of various licit and illicit drugs based on specific criteria (Van Amsterdam et al., 2015) and how harms may emerge from divergent regulatory regimes (Rogeburg et al., 2018). Below, we reorganize cannabis policy harms based on five key metrics: reducing health and social harm, reducing arrests, reducing the illegal market, expanding treatment, and collecting tax. These goals can be connected to elements of the governance models presented above. For example, lowering the number of arrests is related to deemphasizing the public safety model, expanding treatment is associated with the public health model, and diminishing health harms is connected to regulating cannabis as medicine. Adopting the commercial model is the best way to collect

taxes and reduce the illicit market. Finally, addressing social harms will require adopting key proposals connected to the racial justice model.

Models and Mechanisms of Harm

To understand which models are likely to provide preferred policy outcomes, it may be helpful to consider the models explored to date through the lens of harm reduction. In the following sections, we explore some unintended consequences of contemporary approaches while identifying missed opportunities.

The Dangers of Public Safety

Continuing to criminalize cannabis will ensure stigma persists, disparate enforcement outcomes are sustained, and intrusions by criminal justice actors endure (Mize, 2020). These have long been shown to undermine police-community relations, alienate residents, and undercut legitimacy (Wheeldon & Heidt, 2022). This includes the "collateral harms" of cannabis user criminalization (Fischer et al., 2021) and the adverse effects of a criminal record on personal or professional life prospects (Best & Colman, 2019; Kaplan, 1970; Pinard, 2010). In addition, the knock-on effects of aggressive law enforcement tactics and militarized police (Kraska, 2001) have been exported internationally through police cooperation guided by the U.S. War on Drugs (Braithwaite, 2021).

A comprehensive focus on public safety would include the risks associated with illicit markets, such as exposure to violence, the subversion of the rule of law, and the corruption related to criminal networks and drug trafficking syndicates (Ritter, 2021). For example, rather than separating cannabis from "harder" drugs (Sifaneck & Kaplan, 1995), one public safety risk is that people who use cannabis are forced to seek out dealers who maximize profits by selling various illicit drugs. For example, Parker and Egginton (2002: 430) noted that the "… uptake of heroin and crack was [related to] the availability of these drugs within the recreational scene…" Thus, the risk of embracing a public safety focus may extend the very harms cannabis liberalization purports to address.

The Harms of Public Health

Public health models emphasize the risks of cannabis, even though data about the actual harm associated with its use is inconclusive at best (Grinspoon, 2023). This includes a focus on messaging designed to keep people from using cannabis and ensure treatment for "problem use" exists. Public health models can fail to reduce harm in a variety of ways. First and foremost, these models allow the stigma of cannabis use to persist. For a century, people who use cannabis have been routinely characterized in negative ways (Newhart & Dolphin, 2019). Based on inadequate information and risk-based messaging, they are "…delivered in schools by teachers …[who are] compromised by their official status and conflicting roles as enforcers of school anti-drugs policies and mentors…" (Parker & Egginton (2002: 430). Perhaps the most worrying operational implication of adopting a public health model is the justification it provides for coercive cannabis "addiction" treatments, backed by the threat of criminal prosecution. They remain common.[21] In Canada, this approach appears to increase the influence of healthcare providers, private treatment professionals, and mercurial addiction counselors (Gagnon et al., 2020).

Minimizing Medicinal Cannabis

Some harms associated with the medicinal model result from failing to adopt it. Nutt (2022) argues resistance within the U.K. medical establishment means patients are missing out on effective treatments. New laws liberalizing cannabis research in the U.S.[22] will lead to expanded studies, clinical trials, and new products based on cannabis strains, blends, products, and medicines (Jin et al., 2022). Other harms exist because of the distinctive development of the medical cannabis model in the U.S. These include diversion, where medicinal cannabis is transferred to the recreational market, and increased non-medical use (Terry-McElrath et al., 2020). Doctors have long expressed concern that patients seek medicinal cannabis for nonmedical reasons (Barthwell et al. 2010).[23] While using medicinal cannabis for recreational purposes complicates regulatory fidelity, any potential harm that results from using high-THC cannabis products is far less than those associated with trying to prohibit and limit it (Grinspoon, 2023).

The Costs of Commercial Cannabis

Prohibiting legal access to cannabis was once framed as paternalistic and injurious to liberty and autonomy (Brecher, 1972; Kaplan, 1970). While this libertarian view may still gain adherents, like the medical regulatory framework, the most severe harms emerge from the failure to embrace commercial cannabis. For commercial cannabis to succeed, policymakers must assess various economic factors (Clarke & Cornish, 1985). In Canada, this includes access, cost, quality, convenience, consumer education, and over-regulation.[24] In a 2021 report, the Cannabis Council of Canada (C3) argued that Canadian governments have failed to combat the illicit market, design a sustainable taxation policy, invest in consumer education and awareness, or work to support the financial viability of the burgeoning industry.[25] In a summary of the Review of the *Cannabis Act*, concerns were expressed by stakeholders, retailers, and others about cannabis quality, the cost to consumers, and the limited access to new cannabis products. The *Cannabis Act* prohibits advertising and marketing, leaving illicit sellers in a unique position to attract consumers and promote unregulated cannabis products.[26]

Reconciliation and Racial Justice

There are few harms associated with cannabis policies designed to alleviate racial injustice.[27] However, like the medicinal and commercial models, harm will persist if race and reconciliation are ignored within cannabis policy. For example, disparate treatment and the adverse outcomes of living with aggressive policing and ethno-racial profiling are severe (Chohlas-Wood et al., 2022; Sewell et al., 2021). In Canada, this means committing to research designed to explore whether rates of arrests and convictions for cannabis-related offenses are disproportionately higher among BIPOC individuals in the post-legalization period (Fataah et al., 2023). This also applies to efforts to match statements of reconciliation with meaningful initiatives prioritizing Indigenous peoples in a post-drug-war era (Valleriani et al., 2018: 746).

Polymorphic Cannabis Policy and Harm Reduction

Although the efforts explored above are explicitly connected to existing cannabis policies, no country or jurisdiction relies on just one regulatory model to guide cannabis policy. Cannabis

is a substance that lends itself to a blended model of regulation (Aaronson & Rothschild-Elyassi, 2021). This view is based on theoretical work (Levi-Faur, 2014; Mann, 1993; Scott, 2004) and defines polymorphic governance with reference to chemical properties.[28] Distinct from "polycentric regulation," which refers to how regulation may occur at the sub-national, national, and transnational levels (Black, 2008: 140), polymorphic regulation focuses on how modern states are polymorphous power networks. On this view, different morphs of the state interact in ways that both "…complement and counteract one another" (Aaronson & Rothschild-Elyassi, 2021: 6).

These morphs can help explain why cannabis policy oscillates from hostility to acceptance and from increased use to expansive efforts to control those who consume it (Dufton, 2017). Polymorphic governance allows different forms of authority to ascend, depending on the circumstances. This approach was used to make sense of the history of cannabis criminalization (Wheeldon & Heidt, 2023c). However, it may also be relevant to frame some of the complex interactions within contemporary efforts to regulate cannabis.[29] If cannabis policy exists as an area of polymorphic governance, what is to be done when tensions emerge and multiple morphs struggle for influence?

Cannabis Policy as Harm Reduction

We believe harm reduction provides the best means to orient cannabis policy. To present cannabis policy as harm reduction, we link key findings of policy harms based on the analysis of expert views on cannabis liberalization (Wilkins et al., 2022) and critical criminological concepts, including stigma, enforcement, and interventions.

Access, Equity, and Tolerance

The first polymorphic model combines medicinal, commercial, and racial justice models. It assumes there is no compelling public health or safety justification to limit adults' responsible use of cannabis. This model holds that separating medical and recreational cannabis emerged from specific historical developments in the U.S. and serves no purpose other than to create regulatory hurdles and limit access. An emergent approach is reclassifying cannabis in ways that would allow increased research on medicinal and therapeutic value.[30] While establishing clinical evidence for the use of cannabis is emerging (Zürcher et al., 2022), (Zürcher et al., 2022), it must overcome decades of one-sided research and studies designed to uncover harm (Newhart & Dolphin (Newhart & Dolphin, 2019). Enhanced access to cannabis for research (Schwabe et al., 2019) will improve research on cannabis-based medicines (Jin et al., 2022) and ensure medical cannabis is part of mainstream medicine as opposed to a stigma-laden alternative.

In addition to a variety of medical and therapeutic uses (Nutt, 2022), cannabis can serve as a replacement substance for people who inject drugs. This amounts to a significant opportunity to expand harm reduction. The idea of cannabis use as harm reduction is not new (Lau et al., 2015). It appeared in one of the first published medical treatises on cannabis (O'Shaughnessy, 1842). Sifaneck & Kaplan (1995: 500) describe this process as one in which: "…cannabis served as a means of breaking the cycle of hard-drug use and addiction." Some studies note that using cannabis is associated with reduced consumption of alcohol, cocaine, 3,4-methylenedioxy-methamphetamine (MDMA), and Vicodin (Reiman, 2009), as well as injected drugs, including heroin (Gittins & Sessa, 2020).[31] However, harm reduction

principles are underrepresented in medical curricula, leaving medical professionals without the requisite background to provide high-quality care to patients who use drugs (Smith et al., 2023).

In the near future, abandoning the non-evidence-based distinction between medical and non-medical cannabis supply is likely. In general, accessing medical cannabis has been limited by insufficient and inconvenient means of distribution to patients, physicians' reluctance to prescribe, and the status of cannabis within provincial health insurance plans (Lucas, 2008; Ng et al., 2022). Patients who cannot access the medicinal cannabis that they need may turn to the illicit market (Wheeldon & Heidt, 2023c). This requires immediate steps to expand access.[32] These include streamlining consultations, expanding video visits for patients seeking medicinal cannabis, and better integrating trained pharmacists into the provision of medical cannabis (Westall et al., 2024).

The Cannabis Act Review recommends establishing an in-person pharmacy access channel for medical cannabis sales.[33] While this might require legislative changes, it will undoubtedly necessitate provincial partnerships.[34] According to the Canadian Pharmacists Association (CPhA), local pharmacists are "best equipped to provide clinical advice to patients and appropriate oversight in the safe management and dispensing of medical cannabis." This is because pharmacists are "accessible," can review "patient medication profiles for drug interactions," and "ensure that patients have access to a system that offers appropriate medical and clinical support."[35] To ensure that their clinical advice is delivered in ways that resonate with cannabis consumers, some are working with consumers and pharmacists to develop new continuing education curricula for pharmacists and resources for patients and explore to what extent pharmacists can serve as cannabis educators.[36]

In addition to integrating Canadian pharmacists, expanding access to medical cannabis could open new business opportunities, consistent with "reefer reparations" (Mize, 2020). Inspired by equity programs in the U.S.,[37] adopting a racial justice focus could justify programs in which minority-owned cannabis businesses pilot the provision of medical cannabis to recreational consumers. This would provide a short-term competitive advantage and be a practical means to support diversification in this emerging industry. In Canada, this could mean further supporting Indigenous-owned cannabis businesses to address "insufficient connections made between the drug policy reform movement and the movement for reconciliation with Indigenous communities" (Koram, 2022: 309). Inspired by efforts in British Columbia (B.C.),[38] policies might encourage former illegal growers, especially BIPOC, to join the legal cannabis marketplace by developing specific strains and other products. Indeed, allowing pharmacies to distribute medicinal cannabis alongside other producers could expand access while ensuring any increase in prices are held in check (Grootendorst & Ranjithan, 2019).

There are two additional considerations of immediate interest. The first is the sustainability of the cannabis market itself. In 2021, the Cannabis Council of Canada (C3) recommended reducing excise tax and regulatory fees, limiting provincial markups, and better regulating existing online illicit cannabis sales.[39] Beyond taxes and regulations, federal regulations designed to restrict advertising (Haines-Saah & Fischer, 2021) have resulted in demarketing. Linking sustainable legal cannabis markets with reducing the harms associated with the illicit market is a reminder of the polymorphic reality of cannabis governance. Rethinking advertising and marketing are needed, given the paradoxes at the

heart of legal cannabis and the questionable sustainability of the legal market (Wheeldon & Heidt, 2023b).

In addition to market-based policies, more tolerant approaches that embrace cultural and ethnic diversity should be explored. Based on Holland's coffeeshop system, cannabis can be connected to art, poetry, music, prosocial engagement, and responsible use (Sifaneck & Kaplan, 1995). While indoor public cannabis consumption remains restricted, some lounges — like Vancouver's New Amsterdam Cafe — have been operating outside of laws for decades. In Ontario, recent efforts to establish outdoor cannabis lounges follow the experience of the Hot Box Café in Toronto's Kensington market. In that case, legalizing outdoor cannabis consumption resulted from negotiation and cooperation with municipal officials.[40] A market based on a substance that can only legally be consumed at home or in one or two places in the country is likely to struggle.

Rethinking Enforcement

The second polymorphic merger combines public safety and racial justice. It assumes consistent findings over decades about adverse racial disparities can no longer be ignored. This variant of harm reduction, described by some as "reducing arrests" (Wilkins et al., 2022), requires taking steps to confront and reduce the damage done by the justice system itself (Quinney, 1970). Central here is how racial disparities in cannabis enforcement fuel predatory features of criminal justice (Page & Soss, 2021). Brown (2022) suggests cannabis legalization will disincentivize pretextual stops. However, in Canada, the kind of data that would allow policy analysis comparing jurisdictions, legal status, race, and cannabis arrests (Sheehan et al., 2021) is not readily available. In some cases, it is not even captured by policing agencies. For example, while the Royal Canadian Mounted Police (RCMP) are putting policies in place to gather and report on race, much of the data needed for comparative analysis is subject to provincial jurisdiction.

While police services in Alberta, British Columbia, Nova Scotia, and Saskatchewan have provided cannabis arrest data by race and/or ethnicity, other provinces have not been as forthcoming.[41] The challenges of obtaining accurate data on race and ethnicity are also a feature of several reports on street checks in Canadian cities (Montgomery et al., 2019; Tulloch, 2018; Wortley, 2019). A street check is a stop where "identifying information is obtained by a police officer concerning an individual, outside of a police station" (Tulloch, 2018: xiv). In Canada, some local bylaws justify street checks to combat panhandling, loitering, or criminal activity such as "possessing drugs" (Montgomery et al., 2019: 99). Community members have expressed concerns about police street check stops, especially how they may "become an occasion for epidermalization, whereby a law enforcement practice projects onto the skins of civilians locally specific histories and emotions" (Lam & Bryan 2021: 359).

Change is coming, even if it is slow. For example, approximately 500,000 people with criminal records may now be eligible for pardons in Canada.[42] Expediting this process would amount to a profound and overdue effort to redress past injustices and reduce future harm. However, the best means to address cannabis arrests is not to make them in the first place. In Canada, historic race disparities in police contact for cannabis (Owusu-Bempah & Luscombe, 2021) appear to remain despite legalization.[43] Addressing this requires ensuring street check policies include guidance on the practice, use, storage, access, and retention of street check information (Montgomery et al., 2019: xv), including data on race and ethnicity.

Efforts to promote economic and reparative justice related to cannabis are not possible until "policing stops unfairly targeting Black Canadians."[44]

To be meaningful, reforms should target operational approaches and specify the conditions under which police could justifiably interfere with citizens for cannabis-based offenses. This should include clear remedies for citizens unjustly detained or arrested. For those possessing more than the threshold amount, *unless cannabis possession is directly associated with a crime*, diversion to a community-based panel or committee should be preferred. Such an approach offers a means to overcome a significant challenge related to state-centric definitions of problem cannabis use or the past practice of requiring police to fulfill roles associated with social workers or addiction counselors (del Pozo et al., 2021). In Canada, assessing provincial policing agencies' commitment to reform requires encouraging, supporting, and perhaps compelling law enforcement agencies to better collect and transparently share arrest data.

Consent and Cannabis Treatment

The third polymorphic approach applies not to combining different morphs of cannabis regulation but to engaging in moral-legal renegotiation about how to define and respond to problem cannabis use. It assumes the expanding practice of decriminalizing cannabis by expanding and escalating diversion programs is a problem. Coercing people who use cannabis to avoid a criminal record by participating in abstinence-based and stigma-laden programs assumes any cannabis use is hazardous. However, these diversion programs suffer from institutional and systemic racism and the adverse carceral impacts that undermine civil rights and democratic values (Roberts, 2017). As discussed, inequalities within diversion programs persist. In one recent example, Sanchez and colleagues (2020) found ethnic, gender, and racial disparities among those obliged to attend a cannabis diversion program in Texas.

Diversion programs are often presented as a progressive reform, which, while technically accurate, is a view that suffers from the soft bigotry of low expectations. Many diversion programs threaten prosecution if participants fail to comply with guidelines. In addition, the unconscious approval of coercive cannabis treatment programs is itself problematic (Ashton, 2008; Price et al., 2021; Spivakovsky et al., 2018; Stevens, 2012; Szasz, 2007). For example, influential researchers often cite old and methodologically suspect research that asserts up to 30% of people who try cannabis will develop a cannabis use disorder (Hasin et al., 2015; Wagner & Anthony, 2002). These findings have not been replicated anywhere cannabis is legal. In 2020, the Substance Abuse and Mental Health Services Administration (SAMHSA) reported that just over 5% of cannabis users, 12 and older, had a cannabis use disorder.[45] The difference between 30% and 5% is profound. The evidence for cannabis acting as a causal factor for many mental health disorders, including schizophrenia, has not been established (D'Souza et al., 2022; Hamilton & Monaghan, 2019).

The uncomfortable and unethical blending of public safety goals through public health policies is polymorphically pernicious. Using the language of care and treatment to emphasize control and abstinence (Ashton, 2008) harms the credibility of legitimate drug education and treatment programs. While such programming may be less common in Canada, mandatory addiction treatment is increasingly described as an approach that Canadians favor.[46] This combines the "tough on crime" public safety orientation with the public health goal of tackling the "sickness" of addiction. While scholars continue to point out

that mandated drug treatment does not work,[47] some fear the underlying assumption that coercive care is acceptable will be used to further stigmatize "problem" cannabis use in Canada despite its legal status.[48]

This is not to say problematic cannabis use does not exist. Instead of the coerced treatment model, however, diversion programs can connect people to existing resources designed to offer community support when requested. It serves as an authentic alternative to the current practice of embedding support "…*within* criminal sanctions" (Price et al., 2021:118, our emphasis). It affirms autonomy and offers access to voluntary treatment. Used in this way, diversion programs can provide access to support and services for those whose cannabis use is linked to other social, emotional, or psychological challenges. Of course, most cannabis users do not and never will need such support. However, in harm reduction terms, harnessing the vital role of the community when use becomes problematic can be protective against the punitive character of the criminal justice system. Ensuring these supports are based on choice, consent, and harm reduction can affirm ethical treatment and model prosocial community-based connections.[49] One place to start is to require explicit informed consent before patients begin any drug treatment program and provide a means for patients to report programs that rely on implicit coercion (Wheeldon & Heidt, 2022).

Caveats and Concluding Remarks

As a conceptual effort, significant limitations are associated with the pragmatic potential to embrace a polymorphic understanding of cannabis regulation. While we are not the first to consider cannabis and polymorphic regulation (Aaronson & Rothschild-Elyassi, 2021), our effort combines regulatory models in novel ways. However, adopting a polymorphic approach complicates the bureaucratic need to define policies in ways that can be communicated, implemented, or assessed. Moreover, critics of such an approach might reasonably fear the state could use this formulation to justify any policy by rejigging justifications, as needed, to benefit one political calculation or another. We assume that the best way to move forward is to rely on harm reduction as a lodestar to resolve tensions in ways that favor those most likely to face harm. However, this effort will be complicated by some within the international drug policy community who remain committed to pernicious, paternalistic, and prohibitionist ideas.

In this paper, we explored five models of cannabis regulation that guide current cannabis policy. Given the damage done to people who use cannabis, their families, and their communities, we focused on harm reduction as a conceptual lodestar. We argued that the reliance on public safety and public health models of regulation can no longer be justified based on both the existing consensus around cannabis' relative harmlessness (D'Souza et al., 2022) and the depth of damage caused by these approaches (Mize, 2020). While some harms are associated with adopting medicinal, commercial, and even racial justice models of cannabis regulation, the societal consequences are much more severe should these models be ignored. In the place of idealized and unitary monomorphic regulatory models, we applied the concept of polymorphic cannabis regulation. As a result of this approach, three hybrid models of responsible regulation emerged.

In our view, responsible cannabis regulation de-stigmatizes cannabis use, de-emphasizes the policing of cannabis, and re-conceives the nature of interventions for so-called problem cannabis use. Our first model integrates racial equity concerns within commercial models of

cannabis regulation. Creating opportunities for communities disproportionately impacted by cannabis prohibition requires explicitly linking racial justice models with commercial approaches. Investments to increase racial and ethnic diversity might include reforming regulations limiting agricultural development on reserves and piloting advertising and marketing to benefit specific strains, minority-owned companies, or events promoting responsible consumption (Heidt & Wheeldon, 2023). An immediate strategy would be to pilot the provision of medicinal cannabis in the same location where recreational cannabis is available.

The second model considered how public safety could be reimagined. Consistent with the first model presented above, new public safety policy frames will struggle unless the cannabis industry is expanded and diversified. It cannot be that those who never faced the "…negative effects of prohibition…[are the only ones] …in a privileged position to exploit new legal markets."[50] Policies that reduce harms associated with controlling cannabis can promote police accountability, especially when designed to acknowledge race's role in pretextual stops, chokeholds, and no-knock warrants reforms (Brown, 2022). Any potential, however, must be tempered by the recognition that research shows neither decriminalization nor legalization automatically reduces all race disparities in cannabis arrests (Sheehan et al., 2021). In terms of enforcement, normalizing cannabis in Canada requires developing policies that limit cannabis arrests wherever possible and incentivizing the capture and dissemination of race and ethnicity data for all street checks and arrests, including those involving cannabis.

Our third model contains our most controversial suggestion. We argued that for harm reduction to be embraced, several destructive ideas and methods around drug use must first be "undone" (Szalavitz, 2021). This includes the blithe acceptance of mandated cannabis treatment, which instills abstinence-only messaging while threatening criminal records for those who do not play along. This is a problem for racial justice since disparities in cannabis diversion programs persist (Sanchez et al., 2020). These programs undermine tolerance and are a reminder that despite legalization, the aversion to cannabis and those who use it, even medicinally, persists (Reid, 2020). The potential that paternalistic public health concerns overwhelm other interests and modalities remains. To combat the rise of mandated drug 8treatment programs, treatment providers should obtain express, explicit, and informed consent from patients and provide a means for patients to report coercive programs.

The Canadian experience will likely guide other jurisdictions as credible research rooted in real-world experience replaces the poor research of the past. One fascinating development is efforts to expand the provision of cannabis by pharmacists. However, while framed around increasing access,[51] this approach could result in significant built-in gatekeeping. Pharmacists are duty-bound to uncover adverse drug interactions and communicate the perceived risks of cannabis, as they do with any other substance they provide. It is not difficult to imagine how pharmacist-led "counseling" sessions may drift from the provision of medical cannabis to its state-sanctioned restriction. However, by ensuring pharmacists have the right kind of training, they could represent a massive potential source for low-barrier knowledge sharing, expanding access to cannabis and its conscientious consumption.[52] This will require research to uncover the experiences of patients.

We believe more quantitative work is required to assess our polymorphic approach, especially regarding cannabis, race, and ethnicity. This requires a "…focus on increasing the

collection, public reporting, and accessibility of race-based disaggregated data on all things cannabis."[53] We hope future conceptual and qualitative studies can assess and consider whether our approach can meaningfully advance responsible cannabis policy. Rather than lionizing those funded to seek out politically expedient research findings, we maintain that research involving people who use cannabis is the best means to make sense of existing policies (Wheeldon & Heidt, 2023b). Efforts to move beyond prison-based cannabis policies must ensure that threats to liberty are not reproduced, expanded, or reframed in communities in Canada and around the world (Cohen, 1985).

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End Notes

[1] See https://www.canada.ca/en/health-canada/services/publications/drugs-medication/legislative-review-cannabis-act-final-report-expert-panel.html#a11 [Last accessed April 15, 2024].
[2] See https://www.cbc.ca/news/politics/public-health-cannabis-mandated-eview-1.6591442 [Last accessed April 22, 2024]
[3] For example, In the United Kingdom (U.K.), recent pronouncements by former Conservative Prime Minister Boris Johnson and Opposition leader Keir Starmer suggest cannabis policy will remain punitive and steeped in prohibition myths. The obstinance to cannabis reform allows profound criminological harms to continue, especially for Black Britons who have faced disproportionate criminal justice intrusions for decades. In May 2022, London Mayor Sadiq Kahn announced a new London Drugs Commission to review (U.K.) law, with a focus on cannabis and racial justice, in partnership with University College London. Labour MPs, including those in the Shadow government, angrily warning it would hurt their electoral chances in the next election. When the U.K. eventually emerges from its racially retrograde, bi-partisan, anti-science slumber, it will have several international options to consider.
On Keir Starmer, see https://twitter.com/LBC/status/1483006601850236932?s=20&t=pLnXvctq8lVQn-BS9qJ8pg
Retrieved March 30, 2023. For racial disparities in the UK see https://www.independent.co.uk/news/uk/politics/black-people-cannabis-prosecutions-b1853669.html
For more on Sadiq Kahn's commission see https://www.bbc.com/news/uk-england-london-61416295
Retrieved March 30, 2023. The Labour backlash was reported here: https://inews.co.uk/opinion/labour-mps-are-furious-with-sadiq-khan-but-his-drugs-policy-could-work-1629862 Retrieved May 20, 2023.
[4] This study emerged based on data resulting from a freedom of information (FOI) to 14 police services across Canada for single-charge cannabis possession arrest statistics from 2015 to 2017. A FOI was required because "national arrest and charge numbers broken down by race do not exist in Canada, and police are under no obligation to proactively disclose them." See https://www.vice.com/en/article/d35eyq/black-and-indigenous-people-are-overrepresented-in-canadas-weed-arrests. [Last accessed April 22, 2024]

[5] See National Archive of South Africa. SAB BTS 2/1/104 L.N. 15/1SA Draft letter, Prime Minister to Secretary, League of Nations, November 28, 1923. Discussed in Heidt & Wheeldon (2024).
[6] This "theory" suggests that cannabis use results in progression to more seriously addictive and damaging drugs (Newhart & Dolphin, 2019: 28). While it has never been proven, it remains a persistent prohibition myth (Szalavitz, 2021)
[7] See A Brief History of Cannabis and the Drug Conventions, available at: https://www.cambridge.org/core/journals/american-journal-of-international-law/article/brief-history-of-cannabis-and-the-drug-conventions/A8547C998A1D05173495BCD6012329C0 [Last accessed April 5, 2024]
[8] This decision followed from R. v. Smith (2015, SCC 34, JUDGMENTS OF THE SUPREME COURT OF CANADA) see https://scc-csc.lexum.com/scc-csc/scc-csc/en/item/15403/index.do, in which the Supreme Court of Canada ruled that all forms of cannabis were permissible for medical use. The federal governments policy can be found here: https://www.canada.ca/en/health-canada/services/drugs-medication/cannabis/licensed-producers/consumer-information-cannabis.html [Last accessed September 29, 2022]
[9] See https://cannabisresearch.mcmaster.ca/ [Last accessed April 22, 2024]
[10] See https://www.pharmacists.ca/cpha-ca/assets/File/cpha-on-the-issues/MedicalCannabis_FAQ_Final.pdf. [Last accessed April 22, 2024]
[11] For one example, see https://www.royalqueenseeds.com/blog-top-5-most-popular-cannabis-strains-in-the-netherlands-n1304 [Last accessed April 22, 2024]
[12] See https://www.globenewswire.com/news-release/2021/12/28/2358365/0/en/Cannabis-Market-Size-to-Reach-128-92-Billion-by-2028-Genetic-Development-and-Modification-of-the-Cannabis-Boost-the-Market-Demand-States-Vantage-Market-Research-VMR.html [Last accessed April 22, 2024]
[13] See https://dadgrass.com/ [Last accessed April 22, 2024]
[14] For example, Vape Breton, Skosha, and Truro Wedding link place names or name variants to strains and products. See https://cannabis.mynslc.com/en/discover/strain-guide [Last accessed April 22, 2024] Others include Alberta Craft Cannabis and Sitka Weed Works. See https://rabble.ca/labour/sovereignty-labour-and-the-push-for-a-better-cannabis-industry/ [Last accessed April 22, 2024]
[15] While this is a brilliant work around in one way, it highlights the folly of denying consumers information about where to find a registered business, selling a legal product. See https://www.adweek.com/brand-marketing/small-businesses-help-promote-the-weed-shop-next-door-in-legal-ish-campaign/ [Last accessed April 19, 2024]
[16] Current U.S. President Joseph Biden had been a career-long opponent of cannabis reform as a U.S. Senator and was one of the key legislative architects of the U.S. Drug War in the 1980s and 1990s. His shift on cannabis, as President is notable. See https://www.nytimes.com/2024/03/08/us/politics/biden-marijuana-state-of-union.html, [Last accessed April 18, 2024]
[17] See https://www.congress.gov/bill/117th-congress/house-bill/3617 Other provisions of the MORE Act include: End the criminalization of cannabis at the federal level going forward, it would also be retroactive. Cannabis arrests, charges, and convictions would be automatically expunged at no cost to the individual. Imposing a 5% tax on the retail sales of cannabis to go to the Opportunity Trust Fund. The measure was amended to start at 5% and increase the tax to 8% over three years. The MORE Act would create the Office of Cannabis Justice to oversee the social equity provisions in the law. The bill would ensure the federal government could not discriminate against people because of cannabis use, including earned benefits or immigrants at risk of deportation. The measure would open the door to research, better banking, and tax laws, and help fuel economic growth as states are looking for financial resources. [Last accessed March 30, 2022]
[18] In December 2023, The Scotian Cannabis Alliance identified the sale of illegal and untested cannabis products on native reserves as a challenge to the legal cannabis industry in Nova Scotia (Wheeldon, 2023, personal communication)
[19] See https://www.hri.global/what-is-harm-reduction [Last accessed March 30, 2022]
[20] See https://www.vch.ca/en/health-topics/harm-reduction. [Last accessed March 27, 2024]
[21] For example, in Portugal, people referred to Commissions for the Dissuasion of Drug Addiction report feeling judged and stigmatized (INPUD, 2021). In 2021, the Conservative government in the U.K. announced a policy that would require anyone testing positive following an arrest for drug possession and refusing treatment to face prosecution with a maximum penalty of up to six months in jail or a £2,500 fine.
This was first reported here: https://www.telegraph.co.uk/politics/2021/10/05/priti-patel-middle-class-drug-users-will-named-shamed/ [Last accessed March 30, 2022]. For more recent coverage see

https://www.theguardian.com/society/2021/dec/06/middle-class-drug-users-could-lose-uk-passports-under-boris-johnsons-plans [Last accessed February 27, 2022]
[22] In 2022, the U.S. Senate approved a bill that would reverse decades of policy by requiring the Department of Health and Human Services (HHS) to investigate cannabis health benefits. See https://www.feinstein.senate.gov/public/index.cfm/press-releases?id=7A3020FD-4E3B-46E5-83E9-89BF12450C96 [Last accessed March 27, 2024]
[23] Some state laws or medical board rules now explicitly require physicians to provide ongoing care to patients using cannabis. For example, Colorado now has a requirement that the physician have a "bona fide relationship" with the patient, which means the doctor is required to conduct a physical examination of the patient and provide ongoing care. See Newhart & Dolphin, (2019: 91)
[24] As we have argued (Wheeldon & Heidt, 2022), by embracing public health and excluding commercial impulses (Wesley & Murray, 2021), jurisdictions have limited licenses, preventing new products, or and pursued policies that undermine small growers and give advantages to large corporations. High costs and limited access lead consumers are motivated to interact with illicit markets, sustaining potential harms rather than reducing them (Mahamad et al., 2020).
[25] See https://cannabis-council.ca/files/Not-Done-Yet-Report-Card-Rationale-10.19.21.pdf [Last accessed March 30, 2022]
[26] See https://www.canada.ca/en/health-canada/services/drugs-medication/cannabis/laws-regulations/cannabis-act-legislative-review/expert-panel/legislative-review-cannabis-act-report.html#c10c, [Last accessed March 30, 2024]
[27] One might be the potential for "Whitelash" defined as the resistance to racial equality by White people (Bonilla-Silva, 2020). This pales in comparison to the harms from the persistence of racially disproportionate policing. For example, (Chohlas-Wood et al. 2022) show that Black and Hispanic individuals detained under New York's and Chicago's stop-and-frisk programs were frisked more often than comparably risky White individuals and faced policing tactics that were both unnecessary and discriminatory.
[28] A substance is polymorphic if it "…crystallizes in two or more different forms" (Mann, 1993: 75). While these crystalline forms differ physically, they are otherwise the same.
[29] For example, policies may seek to limit use by youth by adopting its public health morph, *while* seeking to reduce illicit cannabis markets in the interests of public safety. Other policy approaches may seek to promote legal and regulated commercial cannabis, *and* try to ensure retail licenses favor BIPOC applicants, or others previously incarcerated as part of the War on Cannabis. This approach to blended or polymorphic governance requires understanding how multiple forms of power of control exits within one regulatory space.
[30] After making it a key issue on the campaign trail, in October 2022, President Biden announced that he was initiating a review of how cannabis is scheduled under federal law. See https://www.forbes.com/sites/sarahsinclair/2024/01/18/dea-considers-rescheduling-cannabis-what-this-means-for-us-and-global-reform/?sh=5337b8c743f1, [Last accessed April 15, 2024].
[31] According to some research, increasing access to retail cannabis is associated with an estimated 17% reduction in all opioid related mortality rates (Hsu et al., 2021).
[32] According to the latest Canadian Cannabis Survey, more than a third of cannabis patients obtain their cannabis from the illicit market. See https://www.canada.ca/en/health-canada/services/drugs-medication/cannabis/research-data/canadian-cannabis-survey-2023-summary.html [Last accessed April 15, 2024].
[33] See https://www.canada.ca/en/health-canada/services/publications/drugs-medication/legislative-review-cannabis-act-final-report-expert-panel.html#a11 [Last accessed April 15, 2024].
[34] In a statement, Health Canada spokesperson Tammy Jarbeau in 2019 suggested: "Enabling cannabis for medical purposes to be sold in pharmacies would require support from the provinces and territories, their regulatory authorities responsible for pharmacists, and pharmacists themselves. Health Canada has previously indicated that it is open to discussing other models of distributing cannabis for medical purposes, including pharmacy distribution, if support exists." See https://toronto.citynews.ca/2019/05/22/why-medical-marijuana-patients-cant-access-their-prescriptions-at-pharmacies/ [Last accessed March 30, 2024]
[35] See https://www.pharmacists.ca/news-events/news/pharmacists-disappointed-with-proposed-cannabis-regulations-concerned-with-impact-to-medical-cannabis-patients/ [Last accessed September 29, 2022]
[36] For more on the Pharmacists as Cannabis Educators (PACE) project, see www.cannabiseducationresearch.ca [Last accessed April 25, 2024].

[37] See http://smart-ny.com/mrta-racial-justice-considerations/, https://masscannabiscontrol.com/equity-programs/, and https://olis.oregonlegislature.gov/liz/2021R1/Downloads/PublicTestimonyDocument/15357, [Last accessed April 25, 2022].

[38] See https://www.canadianevergreen.com/news/b-c-pushes-for-black-market-cannabis-to-go-legal-faces-criticism-from-craft-growers/?utm_source=dlvr.it&utm_medium=twitter&fbclid=IwAR2IngKoCDVcmZ3DYbw6O6NAlocvquqL9rz3VXh3Ej6qV50pUEpHoNYRmMw [Last accessed April 15, 2024].

[39] See https://www.cbc.ca/news/politics/cannabis-changed-canada-1.6219493 [Last accessed April 15, 2024].

[40] See https://mugglehead.com/ontario-cannabis-cafe-hopes-to-see-change-in-consumption-lounge-rules/. However, this negotiation has ebbed and flowed. For example, some report that Roach-O-Rama and HotBox long defied the law by openly allowing cannabis-smoking inside. https://rabble.ca/labour/sovereignty-labour-and-the-push-for-a-better-cannabis-industry/ [Last accessed September 29, 2022]

[41] See https://www.vice.com/en/article/d35eyq/black-and-indigenous-people-are-overrepresented-in-canadas-weed-arrests. [Last accessed September 29, 2022]

[42] See https://www.thestar.com/opinion/contributors/the-saturday-debate/2022/04/16/the-saturday-debate-has-the-legalization-of-cannabis-been-a-success.html which estimates this number based on the number of potential cannabis pardons. See https://www.cbc.ca/news/politics/tasker-pot-pardons-limitations-1.4866610 [Last accessed March 30, 2022].

[43] See https://www.vice.com/en/article/akvpe4/race-drug-arrests-canada. [Last accessed July 7, 2021]

[44] https://policyoptions.irpp.org/magazines/november-2019/black-canadians-sidelined-from-cannabis-economy/ [Last accessed March 31, 2022].

[45] See page 29 of the Key Substance Use and Mental Health Indicators in the United States: Results from the 2020 National Survey on Drug Use and Health. Available at: https://www.samhsa.gov/data/sites/default/files/reports/rpt35325/NSDUHFFRPDFWHTMLFiles2020/2020NSDUHFFR1PDFW102121.pdf. [Last accessed March 31, 2022].

[46] See https://www.cbc.ca/news/canada/british-columbia/kelowna-rcmp-mandatory-addiction-treatment-prolific-offenders-1.6562841 and https://vancouversun.com/news/daphne-bramham-compulsory-addiction-treatment-high-on-canadians-priority-list [Last accessed September 29, 2022]

[47] For a recent summary of a special issue devoted to coerced care see https://www.hhrjournal.org/2022/07/letter-cannabis-coerced-care-and-a-rights-based-approach-to-community-support/ [Last accessed September 29, 2022]

[48] For examples of these concerns based on Bill C22 in Canada see https://uphns-hub.ca/product/bill-c-22-maintains-a-deadly-status-quo-a-montreal-perspective/ and https://bccla.org/2021/04/bill-c-22-aims-to-address-systemic-overrepresentation-in-the-criminal-legal-system-but-does-it-go-far-enough/. [Last accessed March 30, 2022]

[49] One recent tool delivers "evidence-based insights into cannabis, its consumption methods, and fundamental principles of harm reduction. It has been crafted to offer a sufficiently detailed overview, enabling frontline professionals to engage in meaningful conversations with clients who use cannabis, and if needed, offer them appropriate harm reduction guidance." See https://substanceuse.ca/cannabasics-primer-health-and-social-service-providers [Last accessed April 22, 2024].

[50] See https://transformdrugs.org/blog/designing-more-equitable-legal-cannabis-markets. [Last accessed April 22, 2024].

[51] See https://www.pharmacists.ca/news-events/news/pharmacists-disappointed-with-proposed-cannabis-regulations-concerned-with-impact-to-medical-cannabis-patients/ [Last accessed April 22, 2024].

[52] This is a point made by Dr. Daniel Bearwho directs the Cannabis Education Research Team (CERT). For more on the Pharmacists as Cannabis Educators (PACE) project, see www.cannabiseducationresearch.ca [Last accessed April 25, 2024].

[53] See https://policyoptions.irpp.org/fr/magazines/november-2019/black-canadians-sidelined-from-cannabis-economy/ [Last accessed April 22, 2024].

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