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Review

Illicit drug use and harms, and related interventions and policy in Canada: A narrative review of select key indicators and developments since 2000

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ABSTRACT

Background: By the year 2000, Canada faced high levels of illicit drug use and related harms. Simultaneously, a fundamental tension had raisen between continuing a mainly repression-based versus shifting to a more health-oriented drug policy approach. Despite a wealth of new data and numerous individual studies that have emerged since then, no comprehensive review of key indicators and developments of illicit drug use/harm epidemiology, interventions and law/policy exist; this paper seeks to fill this gap.

Methods: We searched and reviewed journal publications, as well as key reports, government publications, surveys, etc. reporting on data and information since 2000. Relevant data were selected and extracted for review inclusion, and subsequently grouped and narratively summarized in major topical sub-theme categories.

Results: Cannabis use has remained the principal form of illicit drug use; prescription opioid misuse has arisen as a new and extensive phenomenon. While new drug-related blood-borne-virus transmissions declined, overdose deaths increased in recent years. Acceptance and proliferation of – mainly local/community-based – health measures (e.g., needle exchange, crack paraphernalia or naloxone distribution) aiming at high-risk drug users has evolved, though reach and access limitations have persisted; Vancouver's 'supervised injection site' has attracted continued attention yet remains un-replicated elsewhere in Canada. While opioid maintenance treatment utilization increased, access to treatment for key (e.g., infectious disease, psychiatric) co-morbidities among drug users remained limited. Law enforcement continued to principally focus on cannabis and specifically cannabis users. 'Drug treatment courts' were introduced but have shown limited effectiveness; several attempts cannabis control law reform have failed, except for the recent establishment of 'medical cannabis' access provisions.

Conclusions: While recent federal governments introduced several law and policy measures reinforcing a repression approach to illicit drug use, lower-level jurisdictions (e.g., provincial/municipal levels) and non-governmental organizations increasingly promoted social- and health-oriented intervention frameworks and interventions, therefore creating an increasingly bifurcated – and inherently contradictory – drug policy landscape and reality in Canada.

Introduction

By the end of the millennium, a sort of 'watershed' point had been reached in Canada regarding illicit drug use and harms, as well as interventions and policy developments (Fischer, 1999). While increasing rates of cannabis use were recorded, many drug-related harm indicators – e.g., HIV and mortality rates among street drug users (SDUs) – had been rising steeply in select locations

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(Bruneau et al., 1997; Hathaway & Erickson, 2003; Strathdee et al., 1997). A new federal drug law (established in 1997) reinforced a predominantly repression-focused approach to drug control, while intensive debates on the need more for public health-oriented policy reform – including cannabis decriminalization – and interventions were occurring (Fischer, Kendall, Rehm, & Room, 1997; Fischer, 1999; Hathaway & Erickson, 2003; Kerr & Palepu, 2001). Some select public health measures – e.g., needle exchange services for injection drug users (IDUs) – had been implemented primarily at local levels, yet continued to struggle for legitimacy and support (Hankins, 1998; Schechter et al., 1999; Strathdee et al., 1997). An extensive amount of research on illicit drug use, related harms as a well as intervention and policy in Canada has been conducted since 2000; yet no comprehensive overview on key indicators and developments exists. The purpose of this review paper is to fill this gap – to provide a comprehensive overview on key developments in illicit drug use, risks/harms, interventions and law/policy in Canada since 2000.

Methods

The primary objective and scope of this study was to compile and summarily present a narrative review of key indicators, data and information on developments in the areas of illicit drug use, harms, interventions/policy in Canada since 2000. In order to identify relevant data and information, we searched key databases (e.g., pubmed, medline, psychlit, embase, social sciences abstracts) for potentially relevant journal publications, focusing primarily on the following areas and applying relevant keywords: epidemiology of illicit drug use and harms (e.g., morbidity, mortality); prevention, public health and treatment interventions; law/criminal justice/enforcement; policy; in addition, 'grey literature' sources (e.g., surveys, government and organizational surveillance/monitoring or policy reports, etc.) were scanned and reviewed, and essential data/information was extracted. The extensive data and information identified was organized into raw thematic information/data 'clusters'; subsequently, two of the authors decided and selected which clusters were to be considered and – on the potentially subjective basis of the authors' interpretation – which key indicators/developments within the sub-topics identified were to be included in the overview. On the basis of the sub-topics identified, narrative information/data summaries on the sub-themes were produced towards the objective of the overall review. It needs to be emphasized that, also given the broad and heterogeneous scope of this review as well as the selective data/information under study, the present manuscript does not constitute a 'systematic' but rather a comprehensive narrative review of data/information on key developments in the topical areas defined. In addition, the review presents an essentially descriptive compilation of relevant indicators/data accepting these at face-value, i.e. without further extensive comments on or inquiry into the methods, quality, validity, etc. of the data/indicators – as maybe appropriate for other (e.g., systematic) types of reviews – presented as the main empirical part of the study.

Results

Drug use epidemiology

Cannabis has continued to be the most commonly used illicit drug in the general population. A series of national general adult population surveys (2004–2012) have found prevalence levels for 'past year use' ranging from 10% to 14% (Health Canada, 2014b); these rates were largely confirmed by key provincial surveys [e.g., CAMH Monitor (Ialomiteanu, Adlaf, Hamilton, & Mann, 2012)]. Cannabis use levels are considerably higher among young people – e.g., ages 16–29 – where 'past year use' rates of 25–36% have been found (Adlaf, Demers, & Gliksman, 2005; Boak, Hamilton, Adlaf, & Mann, 2013; Health Canada, 2014a). A newly arising phenomenon, initially documented around 2005 and following similar US trends, has been non-medical prescription opioid use (NMPOU) in various – general and special –populations in Canada (Fischer & Argento, 2012; Fischer, Rehm, Goldman, & Popova, 2008). While definitions and assessments of NMPOU have varied, 5–8% of general population adults, yet 5–20% of adolescents and young adults (e.g., secondary and post-secondary students) reported 'past year' NMPOU in various national and/or provincial surveys conducted since 2008 (Brands, Paglia-Boak, Sproule, Leslie, & Adlaf, 2010; Fischer & Argento, 2012; Shield, Jones, Rehm, & Fischer, 2013). The use of other illicit drugs (e.g., stimulants, hallucinogens, ecstasy) has remained relatively stable within low prevalence ranges of 1–2% in general adult populations; similarly true for general adolescent/student populations at somewhat higher levels (Health Canada, 2014b).

Some notable changes in illicit drug use characteristics have been observed in key marginalized populations, including local street drug user (SDU) populations. For example, while among a pan-Canadian ('I-Track') survey of injection drug users (IDUs) assessed 2003–2005 (Phase 1) and 2005–2008 (Phase 2), cocaine (78% and 81%) remained the most commonly injected drug, combined heroin & cocaine injection fell from 14% to 11%; conversely, prescription opioid (PO) injection – including oxycodone (17–39%) or morphine (6–40%) – markedly rose, and was more common than heroin (28%) injection in the latter assessment period (PHAC, 2006, 2013b). The Vancouver Injection Drug Use Study (VIDUS) cohort saw substantive declines in both cocaine and heroin injection use in 2000–2007 (Buxton, Mehrabadi, Preston, & Tu, 2007; Urban Health Research Initiative, 2009). In a pan-Canadian multi-site cohort of illicit opioid drug users ('OPICAN'), the use of heroin significantly declined in 2001–2005 in most sites, with simultaneous increases in PO use (Fischer et al., 2005; Fischer, Cruz, & Rehm, 2006). Other local SDU cohorts – e.g., in Montreal – reported major recent increases in PO use (Bruneau, Roy, Arruda, Zang, & Jutras-Aswad, 2012; Roy, Arruda, & Bourgois, 2011). At the same time, marked increases in stimulant use occurred. In both I-Track surveys, crack-cocaine was the most commonly used non-injection drug (65.6% and 67.1%) excluding alcohol and cannabis (PHAC, 2006, 2013b). In the VIDUS cohort, baseline reporting of crack-cocaine smoking increased from 7% in 1996 to 43% in 2005 (Werb et al., 2010), and became a predominant form of SDU in many urban locales (Haydon & Fischer, 2005; Leonard et al., 2008; Roy et al., 2012). Similarly, there have been reports of elevated levels of crystal methamphetamine (CM) use and related harms in select risk populations, although this has been concentrated mainly in young and vulnerable risk populations (Bungay et al., 2006; Buxton & Dove, 2008; Department of Justice Canada, 2007; Maxwell & Rutkowski, 2008). Between 2% and 5% of youth/secondary students from different (e.g., Western, Eastern) Canadian regions reported CM use, although with indications of declining trends since pre-2000 (Buxton & Dove, 2008); data from pan-Canadian youth treatment facilities have indicated a substantive decline – from 21% in 2005/06 to 6% in 2009/10 – in CM related treatment admissions (Verdichevski, Burns, Cunningham, Tavares, & Callaghan, 2011). 70% of street youth in Vancouver reported a history of CM use, and its prevalence among VIDUS participants approximately tripled between 1999 and 2004 (Fairbairn et al., 2007; Wood et al., 2008a). In various analyses, CM use has been associated significantly with social marginalization (e.g., homelessness), key risk behaviours (e.g., paraphernalia sharing, sex work, injection initiation) (Chettiar, Shannon, Wood, Zhang, & Kerr, 2010; Fairbairn et al., 2007; Marshall, Kerr, Qi, Montaner, & Wood, 2010; Werb et al., 2013) as well as a predictor

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