



CANADIAN  
**NURSES**  
ASSOCIATION

# Harm Reduction and Currently Illegal Drugs

Implications for Nursing Policy, Practice,  
Education and Research

Discussion Paper

This paper has been prepared by the Canadian Nurses Association (CNA) to stimulate dialogue on a particular topic or topics. The views and opinions expressed in this paper do not necessarily reflect the views of the CNA board of directors.

CNA is the national professional voice of registered nurses in Canada. A federation of 11 provincial and territorial nursing associations and colleges representing 143,843 registered nurses, CNA advances the practice and profession of nursing to improve health outcomes and strengthen Canada's publicly funded, not-for-profit health system.

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## Executive Summary

Registered nurses (RN), regardless of the settings in which they work, frequently care for people experiencing the impacts of substance use. Providing nursing care in the context of substance use, particularly illegal substance use, can raise questions and issues for RNs and have an impact on the provision of care. “Harm reduction” has been identified as a public health response to reducing the negative consequences associated with risky behaviours, including substance use. This discussion paper focuses specifically on harm reduction aimed at reducing the health and social harms associated with illegal drug use. The paper presents current perspectives and evidence on harm reduction policy and practice, and identifies the implications for nursing policy, practice, research and education. It is anticipated that this information will inform discussions about appropriate policies, practices and standards to improve the delivery of health care.

There are two dominant policy approaches to reducing the harms of illegal drugs: (1) an approach that uses prohibition and law enforcement to criminalize drug possession and use, and (2) a public health approach that seeks to increase safer use of illegal drugs to reduce harms to health and well-being. A review of the international, national, provincial and municipal policy context highlights tensions between public health and prohibitionist approaches to illegal drug use. Provincial and international policies have increasingly shifted toward harm reduction whereas Canadian federal drug policy appears to be embracing a law enforcement approach in spite of a lack of evidence that such approaches are effective. Such tensions produce a policy schism in which RNs may be caught between evidence, ethics and policy.

There is substantial empirical evidence to support the public health and safety benefits of harm reduction strategies. Needle distribution and recovery programs have been shown to be safe, effective and cost-saving in reducing HIV risk behaviours and increasing access to health and social services for people who use injection drugs. Outreach strategies are a low-cost, effective means of reaching people who use drugs, and are particularly effective if they incorporate peer-based outreach. Supervised injection services reduce the rate of overdose deaths and HIV risk behaviours, increase access to drug treatment and reduce public disorder. Methadone maintenance and heroin prescription are safe and cost-effective approaches to maintenance. Initial studies of heroin prescription have shown that it improves health outcomes and reduces illegal drug use and crime without any negative impacts on the community. A review of the literature revealed a research gap related to models for delivery of harm reduction services, such as needle distribution and recovery sites and supervised injection sites, and the role of RNs in the delivery of services. Objections to harm reduction are not grounded in evidence. Public opinion surveys frequently support harm reduction programs.

Nursing professional and ethical standards are consistent with the values of harm reduction and require nurses to use the best evidence available in their practice. This paper discusses legal and

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ethical perspectives on the distribution of harm reduction supplies, supervised injection and the provision of nursing care to people who use illegal drugs.

RNs who care for people who use illegal drugs require knowledge of harm reduction as well as awareness of the policy factors that shape legal and ethical nursing practice. Although harm reduction is a means of reducing the harms of illegal drugs, it is a partial approach to addressing the health inequities associated with illegal drug use. To fully address those health inequities, attention must be paid to current drug and policing policies as well as other social policies, such as housing and income, as part of a broader social justice commitment.

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## Introduction

Registered nurses (RN) caring for people across the lifespan in acute care and community settings may encounter situations in which the health of individuals is being impacted by drug use and the circumstances surrounding drug use. They may be the first point of contact for populations vulnerable to the harms of illegal drugs in a variety of settings that include community health centres, acute care hospitals, prisons and street outreach. There are many scenarios in which nurses<sup>1</sup> might encounter issues and harms associated with illegal substance use.

Nurses have a responsibility to provide appropriate, nonjudgmental care to individuals and their families who may be affected by substance use, regardless of the setting and an individual's class, income, age, gender or ethnicity. For example, nurses working in public health may encounter youth in schools who are experimenting with or actively using illegal drugs. Nurses in the community may care for families affected by violence or other harms of substance use. Nurses in acute care settings may care for people who are hospitalized for chronic health concerns related to drug use such as advanced Hepatitis C and AIDS, or for complications of drug use such as abscesses or overdoses.

This discussion paper provides current perspectives and evidence on harm reduction as a goal or strategy of policies and programs that focus on illegal drug use. On the basis of this review, the implications for nursing policy, practice, research and education are discussed to inform discussions about appropriate policies, practices and standards in the care of people who use illegal drugs. The development of this paper was guided by two specific objectives:

1. Undertake a review synthesizing domestic and international literature on harm reduction theories and strategies relevant to prevention of the transmission of blood-borne pathogens, illnesses secondary to injection and smoking practices, and overdose deaths, with an emphasis on illegal drug use. Give attention to collaborative strategies (government, public health and professional associations), education, innovative public health and outreach programming, research, and existing health and public policy.
2. Develop a discussion paper identifying historical and theoretical approaches to harm reduction and policy trends; successful innovations and resources to strengthen nursing practice in education, administration and research; and key issues and gaps that hinder nurses' role in effective prevention, treatment and care.

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<sup>1</sup> In this document, "nurses" refers to registered nurses (RN) and registered psychiatric nurses (RPN).

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This discussion paper is organized into five major sections followed by overall conclusions:

- The first section discusses the prevalence of illegal substance use in Canada, the harms of illegal drug use and the social, economic and political context that creates vulnerability to the harms of illegal substance use.
- The second section is an overview of the key concepts in harm reduction and a discussion of harm reduction and nursing.
- The third section discusses international, national and provincial drug policy relevant to harm reduction.
- In the fourth section, the evidence base for harm reduction is reviewed in relation to specific harm reduction strategies that have reducing the harms of illegal drug use as a goal.
- In the fifth section, ethical and legal perspectives associated with harm reduction are highlighted and discussed.
- Lastly, a set of conclusions highlights key directions for nursing policy, practice, education and research.



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## I. Illegal Drug Use in Canada

“Illegal drug use” refers to the use of psychoactive substances that are identified as controlled substances in Canada’s federal drug control statute, and are grown, bought or consumed for non-medical, non-scientific or other unauthorized purposes. In Canada, commonly used illegal drugs include cannabis (marijuana), cocaine and crack cocaine, heroin, hallucinogens, amphetamines, opiates and ecstasy, and combinations of these drugs. Although some use the term “illicit drug use,” in this paper the term “illegal drug use” is used as it more accurately reflects the relationships of these drugs to current drug law. Many prescription medications, such as morphine, oxycodone, benzodiazepines and methadone, are also bought and sold illegally.

The harms of illegal drug use are exacerbated in certain social conditions: the consequences for health and well-being are magnified for people experiencing the effects of poverty and homelessness.

According to the 2004 Canadian Addiction Survey (CAS), the prevalence of illegal drug use varies by type of drug (Adlaf, Begin & Sawka, 2005). Approximately 14 per cent of participants reported use of cannabis in the past year, with almost 70 per cent of young people aged 18-24 years reporting having tried cannabis. In 2008, use of cannabis was 11.4 per cent (Health Canada, 2008).<sup>2</sup> In 2004, about one in six Canadian adults reported lifetime use of other illegal drugs such as hallucinogens, cocaine, heroin and ecstasy, but use of these illegal drugs in the past year was found to be less than 1 per cent except for cocaine (1.9 per cent). When the results of this survey were compared with those of earlier surveys, it was found that use of illegal drugs other than cannabis increased between 1994 and 2008 (Adlaf, Begin & Sawka, 2005; Health Canada, 2008). Although cocaine and crack use appeared to have decreased between 2004 and 2008, the decrease was not significant.

Illegal drug use can be found in all sectors of the Canadian population. For example, cocaine use can be a potential source of prestige and power for people with wealth (Bethune, 2009). The CAS findings suggest that illegal drug use represents a relatively small proportion of the overall drug use by Canadians and is responsible for 20.7 per cent of the social cost of problematic substance use; by comparison, alcohol use and tobacco use are responsible for 36.6 and 42.7 per cent, respectively (Rehm et al., 2006).<sup>3</sup> Approximately 13 per cent of Canadians surveyed in 2002 used some type of illegal drug in the past year, and 0.8 per cent reported dependency on illegal drugs (Tjepkema, 2004).

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<sup>2</sup> Selected findings of the 2008 Canadian Alcohol and Drug Use Monitoring Survey are also included as there are similarities in questions and methodologies between this survey and the 2004 Canadian Addiction Survey, although they were administered at different times of the year.

<sup>3</sup> According to Rehm et al. (2006), the costs to health care, law enforcement and workplace and home productivity as a result of premature death and disability make up the overall social cost of substance use, which was estimated to be \$39.9 billion in 2002. “Tobacco accounted for about \$17 billion or 42.7 per cent of that total estimate, alcohol accounted for about \$14.6 billion (36.6 per cent) and illegal drugs for about \$8.2 billion (20.7 per cent)” (p. 1).

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Illegal drug dependency contributes to the overall burden of disease and is associated with increased morbidity, mortality, disability and health-care costs (Fischer, Rehm, Brissette, et al., 2005; Wood, Kerr, et al., 2003). Further, the harms of illegal drug use are exacerbated in certain social conditions: the consequences for health and well-being are magnified for people experiencing the effects of poverty and homelessness (Galea & Vlahov, 2002). For example, in a study of illicit drug use in five Canadian cities, Fischer, Rehm, Brissette, et al. (2005) found not only that people who injected illegal drugs experienced increased physical and mental health problems but also that many of them lacked permanent housing, did not have access to treatment services and experienced social marginalization. Illegal drug use, particularly injection drug use, can be highly stigmatizing, and people affected by poverty and homelessness often carry the heaviest burden of stigma in society as a result of multiple intersecting factors (Strike, Myers & Millson, 2004; Takahashi, 1997).

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### *Health and Social Harms of Illegal Drug Use*

Many health and social harms are associated with illegal drug use. This section outlines some of the key harms.<sup>4</sup>

**Blood-borne diseases:** The use of specific psychoactive drugs by injection or inhalation has played a dramatic role in the spread of HIV and the hepatitis C virus (HCV) worldwide. In countries outside of sub-Saharan Africa, one of the main drivers of the HIV epidemic is injection drug use (Joint United Nations Programme on HIV/AIDS, 2008). In Canada, injection drug use was responsible for about 19 per cent of new HIV infections in 2002 and 14 per cent in 2005 (Public Health Agency of Canada [PHAC], 2007) but the percentage varied geographically and by population. In spite of the drop between 2002 and 2005, the estimated percentage of new HIV infections associated with injection drug use remains unacceptably high. Over 30 per cent of new AIDS cases diagnosed in 2006 were attributable to injection drug use (PHAC, 2007), which reflects the contribution of injection drug use to the development of HIV infection in the preceding years.

Injection drug use is the main risk factor for transmission of HCV in Canada (PHAC, 2008). HCV appears to be more readily transmitted via blood-to-blood contact than HIV: 63 per cent of HCV cases reported in Canada between 2004 and 2008 were associated with injection drug use (PHAC, 2008).

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<sup>4</sup> Hunt et al. (2003) described a number of physical, psychosocial and psychological as well as societal harms associated with drug use. Not all of the harms identified have been included here.

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The prevalence of HCV infection among people who used injection drugs in seven Canadian cities between 2003 and 2005 ranged from approximately 61 to 68 per cent (PHAC, 2006). The incidence of HCV was higher for those who injected cocaine or crack, those who injected drugs in public spaces and those who injected drugs more than 1-2 times per week. In 2008, 70-80 per cent of new cases of HCV were attributable to injection drug use. Crack smoking has been associated with increased risk of HCV infection (PHAC, 2008).<sup>5</sup>

**Overdoses:** Increased risk of overdose is associated with the use of opiates. Overdose deaths have contributed to increased mortality rates among people who use illegal opiates, particularly those who inject heroin (Bargagli et al., 2005; Darke, Ross & Hall, 1996; Hulse, English, Milne & Holman, 1999; Oppenheimer, Tobutt, Taylor & Andrew, 1994). In one Canadian study, close to one in five people who used injection drugs reported an overdose experience in the past six months (Fischer, Rehm, Brissette, et al., 2005). Kerr, Wood, et al. (2004) found that substance use and overdose was the third most common presenting diagnosis in a Vancouver hospital emergency department over a two-year period among people who use injection drugs. Vulnerability to overdose is exacerbated in certain situations, such as release from prison when drug tolerance may be reduced.

**Soft-tissue infections:** Soft-tissue infections such as abscesses and cellulitis are commonly associated with injection drug use (Binswanger, Kral, Bluthenthal, Rybold & Edlin, 2000; Lloyd-Smith et al., 2005). In one Vancouver study, abscesses, cellulitis and other soft-tissue infections were found to be the most common reason for emergency department visits over a two-year period, accounting for 18.3 per cent of the visits (Kerr, Wood, et al., 2004). In primary care, individuals often present with the need for wound care.

**Criminalization:** Law enforcement approaches to drug use have been found not to impact drug use and have been associated with increased HIV prevalence and other harms such as stigma and discrimination (Friedman et al., 2006; Wood, Spittal, et al., 2004). For example, illegal drug use may be associated with negative attitudes and stereotypes (Strike, Myers & Millson, 2004). Legal concerns may fuel negative attitudes toward people who use drugs and may prevent nurses from participating in harm reduction programs (Pauly, Goldstone, McCall, Gold & Payne, 2007). Law enforcement approaches to illegal drug use have contributed to the growth of prison populations and escalate the harms of drug use (Drucker, 1999; Friedman et al., 2006). For example, incarceration has been associated with increased risk of HIV transmission (Small, Wood, Jurgens & Kerr, 2005; Werb et al., 2008; Wood, Montaner & Kerr, 2005). Experience in other countries has shown that tougher drug laws have not addressed the problems associated with illegal drug use but rather in some cases have exacerbated them. The international war on drugs in countries such as Colombia and Mexico has been identified as undermining political stability and economic relations in these countries (Streatfield, 2001).

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<sup>5</sup> Other common problems associated with crack use include respiratory problems (e.g., Hunt et al., 2003).

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**Stigma:** Illegal drug use and people who use illegal drugs are often highly stigmatized. Stigma is an outcome of social processes in which the person is marked as different or other on the basis of negative characteristics that result in social devaluing and spoiled identities (Goffman, 1963). Stigma can lead to active discrimination when people internalize negative beliefs about the stigmatized person or group. Stigma marks individuals as outsiders and is socially isolating (Takahashi, 1997). The stigma and discrimination associated with drug use can restrict access to health care and can have a negative impact on the health and well-being of individuals (Butters & Erickson, 2003; Crockett & Gifford, 2004; Gelberg, Browner, Lejano & Arangua, 2004; Napravnik, Royce, Walter & Lim, 2000; Stajduhar et al., 2004). RNs and other health-care providers have been found to hold negative attitudes concerning people who use substances, particularly illegal drugs (Carroll, 1995; McLaughlin & Long, 1996; McLaughlin, McKenna, Leslie, Moore & Robinson, 2006). It is increasingly evident that negative attitudes and experiences are not isolated problems for individuals but rather they occur in a cultural context in which social norms and policies play a role (Boyd, 1991; Escohotado, 1999).

According to Boyd (1991), criminalization of some psychoactive drugs has become part of our “cultural script.” Furthermore, a focus on law enforcement can contribute to a “war on drugs” mentality that arises from prohibitionist approaches to drug use and can hinder the introduction of evidence-based measures that can reduce the harms of drug use (Elliott, Csete, Palepu & Kerr, 2005).

**Violence:** Illegal drug use in the context of rigorously enforced prohibition has been associated with violence at several levels: within the community of illegal drug users, within the broader community (e.g., gangland violence), or on a national scale (e.g., Colombia [Streatfield, 2001] or Mexico [Lacey, 2009]) or international scale (Urban Health Research Initiative, 2010). In an attempt to decrease violence against individuals and large-scale violence affecting communities and national stability, Mexico recently decriminalized personal possession of the major illegal substances (Associated Press, 2009).

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## *Vulnerability to Harms of Illegal Drug Use*

Substance use occurs within a social context; social conditions mediate initiation of drug use and instances and patterns of ongoing use, as well as cessation, abstinence and relapse (Galea, Nandi & Vlahov, 2004). Gender, ethnicity, age and socio-economic status affect vulnerability to the harms of drug use. Women and youth are highly vulnerable to the harms of drug use, including harms such as HIV infection and violence. In the 2008 Canadian Alcohol and Drug Use Monitoring Survey (Health Canada, 2008), youth aged 15-24 years were 10 times more likely to report harms of drug use

than adults, with one in 10 youth reporting harms. In several Vancouver studies, female street workers and other women were found to have higher HIV prevalence rates than men (McInnes et al., 2009; Shannon et al., 2008). Equally concerning is the increased incidence of HIV infection among Aboriginal Peoples, both men and women (Craib et al., 2003; Wood, Montaner, et al., 2008). People who use drugs often have a history of trauma and abuse (Liebschutz et al., 2002), and increased rates of drug use have been reported for women who have experienced domestic violence. Spittal et al. (2006) found that the mortality rate for women who use illegal drugs and are homeless is up to 50 per cent higher than among women who are not homeless. In unsafe housing conditions, women often experience physical and sexual abuse and depression, as well as drug addiction, and many consider suicide (McCracken & Watson, 2004; Pennbridge, Mackenzie & Swofford, 1991). People experiencing problematic substance use or addiction often have experienced higher rates of trauma, such as physical or sexual abuse during childhood or adulthood, as well as social and economic disadvantages or cultural dislocation (Alexander, 2008; Liebschutz et al., 2002; Mehrabadi et al., 2008; Pearce et al., 2008; Stein, Burden Leslie & Nyamathi, 2002).

Low socio-economic status is associated with increased drug use. Substance use has been observed to be higher in impoverished neighbourhoods. However, the relationship between substance use and poverty or homelessness is multidirectional rather than linear. For example, although drug use may precede homelessness, some researchers have found that drug use follows homelessness because individuals begin to use drugs as a means of coping with adverse living conditions and stress (Johnson & Fendrich, 2007). Drug use can be understood as a coping response, and addiction as a means to adapt to desperately difficult situations (Alexander, 1990; Maté, 2008).

There is growing awareness that vulnerability to the harms of illegal drug use, particularly the risk of HIV infection, is increased within certain environments, including disadvantaged and impoverished neighbourhoods, lack of stable housing and incarceration (Friedman et al., 2006; Rhodes, 2002; Rhodes et al., 2006; Rhodes, Singer, Bourgois, Friedman & Strathdee, 2005). A growing number of

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studies have identified lack of secure housing and low socio-economic status as factors affecting the health of people who use illegal drugs. For example, Shannon, Ishida, Lai and Tyndall, et al. (2006) explored the impact of living in unregulated single-room-occupancy hotels on the health status of people using drugs in Vancouver. They found that study participants who lived in such hotels had higher rates of HIV infection and emergency department use, were more likely to have experienced violence, and were more likely to have used multiple drugs than participants who lived in other types of housing. Strathdee et al. (1997) found that living in unstable housing, having less education and engaging in sex work were predictors of positive HIV status. Manzoni, Brochu, Fischer and Rehm (2006) found that unstable housing was a predictor of engagement in property crime among crack cocaine users. Incarceration has been identified as a risk factor for HIV infection because of the high rate of syringe sharing and the lack of needle distribution and recovery programs and safer tattooing programs in institutions operated by the Correctional Service of Canada (National Collaborating Centre for Infectious Diseases, 2008; Small, Wood, Jurgens & Kerr, 2005; Wood, Montaner & Kerr, 2005). In the absence of harm reduction programs in prisons, there is increasing evidence of high rates of needle sharing and inconsistent condom use among people who are incarcerated (Milloy et al., 2008; Werb et al., 2008). All of these authors have identified the need to address the socio-political and economic factors that increase vulnerability to HIV infection by focusing not only on drug policy but also on housing and other social policies.

The studies outlined above suggest that unstable housing, drug use and poor health are linked to vulnerability to HIV/AIDS, and that the social determinants of health play a role in shaping the harms of drug use (Galea, Rudenstine & Vlahov, 2005; Hathaway, 2001). The social conditions that produce vulnerability to HIV infection also contribute to increased vulnerability to other harms associated with illegal drug use. Thus, actions directed to reducing the harms of illegal drug use need to encompass more than strategies that reduce transmission of HIV or HCV: they need to embrace changes to housing and social policies that reduce vulnerability.

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## II. Overview of Harm Reduction

### *Definitions of Harm Reduction*

Harm reduction is a pragmatic public health approach to reducing the negative consequences of risky behaviours. Although this paper focuses on illegal drugs, it should be mentioned that nurses and others also draw on a range of harm reduction strategies to reduce the harms associated with using alcohol and other legal drugs, driving cars, riding bicycles and sexual practices by encouraging the use of safe drinking guidelines, seatbelts, helmets and condoms, respectively. Many of these harm reduction interventions have been incorporated into health promotion education and some, such as seatbelt use, are legislated. Such harm reduction strategies (e.g., engaging in protected sex, refraining from driving after drinking) have benefits for individuals, families and communities.

“ ‘Harm Reduction’ refers to policies, programmes and practices that aim primarily to reduce the adverse health, social and economic consequences of the use of legal and illegal psychoactive drugs without necessarily reducing drug consumption. Harm reduction benefits people who use drugs, their families and the community.”

The harm reduction movement gained prominence in the 1980s as injection drug use became a key mechanism for the transmission of HIV (Ball, 2007; Hilton, Thompson, Moore-Dempsey & Janzen, 2001). The current harm reduction movement originated in the Netherlands and the United Kingdom as a more humane approach than the law enforcement approach to reducing the harms associated with drug use (Marlatt, 1996). Early work in the field of harm reduction emphasized the need for a pragmatic approach to addiction and drug use that reduced harm without expectations of abstinence or reduced use (Lenton & Single, 1998; Riley & O’Hare, 2000).

Building on this early work, the International Harm Reduction Association [IHRA]<sup>6</sup> (2010, p. 1) states, “‘Harm Reduction’ refers to policies, programmes and practices that aim primarily to reduce the adverse health, social and economic consequences of the use of legal and illegal psychoactive drugs without necessarily reducing drug consumption. Harm reduction benefits people who use drugs, their families and the community.”

This definition encompasses reducing the harms of all psychoactive drugs (legal and illegal), including tobacco, alcohol, prescription drugs and controlled drugs. Harm reduction, as an approach, has been embraced by the World Health Organization, the Joint United Nations

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<sup>6</sup> The International Harm Reduction Association was developed to advance knowledge, policy and practice related to harm reduction and to support action to stop the negative consequences of drug use. Since 1990, the association has hosted an international harm reduction conference in various international locations. This has been a key forum for debating issues related to harm reduction policy, practice and research.

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Programme on HIV/AIDS, the United Nations Office on Drugs and Crime (UNODC), the United Nations Children’s Fund, the International Federation of Red Cross and Red Crescent Societies (International Federation of Red Cross and Red Crescent Societies, 2003) and the World Bank (Wodak, 2009).

Harm reduction emphasizes a value-neutral position on the question of drug use that is free of judgments of those who use drugs (Canadian Centre on Substance Abuse [CCSA], 1996; Keane, 2003; Marlatt, 1996; Marlatt & Witkiewitz, 2010). Harm reduction emphasizes the importance of treating all people with respect, dignity and compassion regardless of drug use. This is particularly relevant given the stigma associated with illegal drug use and the societal judgments often experienced by those who use illegal drugs.

The values of harm reduction are consistent with the values guiding professional ethical nursing practice as outlined in CNA’s *Code of Ethics for Registered Nurses* (Canadian Nurses Association [CNA], 2008; Lightfoot et al, 2009; Pauly, Goldstone, McCall, Gold & Payne, 2007). Specifically, nursing values related to the provision of safe, ethical, competent and compassionate nursing care; the promotion of health and well-being; the promotion of and respect for informed decision-making; the preservation of dignity in which care is provided on the basis of need; and the promotion of justice are compatible with the values of harm reduction described earlier in this paper.

Harm reduction focuses on promoting safety and preventing death and disability without requiring that substance use be discontinued. It focuses on ensuring safer use and the health and safety of all members of the community. For example, encouraging people not to drink alcohol before driving promotes safer use that reduces harms to individuals and the community. Harm reduction is complementary to prevention and treatment strategies and is part of a comprehensive response to substance use as one of the four pillars to reduce the harms of substance use (MacPherson, 2001).

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## *Key Principles of Harm Reduction*

The most commonly cited principles underpinning harm reduction include pragmatism, humanistic values, reducing risks and harms of drug use, evidence of costs and benefits, emphasis on human rights, immediacy of goals, acknowledging incremental change, challenging policies and practices that maximize harm, transparency, and meaningful participation of those who use drugs in policy-making and program development (CCSA, 1996; Hunt et al., 2003; IHRA, 2010; Riley & O’Hare, 2000; Thomas, 2005). Harm reduction is a pragmatic approach to drug use in which use is viewed as an enduring feature of human existence (CCSA, 1996; IHRA, 2010; Marlatt & Witkiewitz, 2010; Riley & O’Hare, 2000). Drug use occurs along a continuum ranging from abstinence to non-problematic use to problematic use (British Columbia [BC] Ministry of Health Services, 2004). Harm reduction focuses on preventing the harms associated with use rather than eliminating use (Marlatt, 1996).

One of the key principles of harm reduction is that policies and programs should be based on the best evidence available and aim to be cost-effective. Immediacy of goals, another key principle, is often described as meeting people where they are in relation to their situation and not expecting a reduction in use but rather focusing on their needs and immediate priorities. Incremental or small changes are acknowledged and often viewed as more realistic than large gains (IHRA, 2010). Increasingly, the harm reduction movement has embraced human rights and the rights of people who use drugs to access the highest attainable standard of health care and social services and to be free from discrimination. A final key principle is the meaningful participation of those who use drugs in the development of related policies and programs and their involvement in decisions that affect them (Canadian HIV/AIDS Legal Network, 2005).

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In summary, harm reduction:

- focuses on reducing the harms associated with a broad range of substances;
- does not require abstinence or discontinuation of use;
- is complementary to prevention and treatment approaches;
- empowers people who use drugs to make informed decisions;
- emphasizes humanistic values, including dignity, compassion and nonjudgmental acceptance of people who use drugs;

- 
- is cost-effective and evidence based;
  - includes participation by people who use drugs in policy-making and program development; and
  - challenges policies and programs that maximize harm.

### *Harm Reduction as an Approach to Illegal Drug Use and Addiction*

Harm reduction is part of a public health promotion and illness-prevention framework to prevent, reduce and mitigate the harms of drug use for individuals and communities (Loxley et al., 2004). There is not just one harm reduction program model; rather, programs vary on the basis of individual and group needs (Marlatt & Witkiewitz, 2010). For example, approaches to reducing harm among youth may include strategies to prevent or delay the start of drug use, and may promote knowledge about safer use for those who have started or are contemplating initiating drug use (Marlatt & Witkiewitz, 2010).

Harm reduction is an approach to caring for people who use drugs (Marlatt, 1996; Marlatt & Witkiewitz, 2010). Brickman et al. (1982) described four models of helping people experiencing addiction: moral, medical (or disease), enlightenment and compensatory. According to Marlatt and Witkiewitz (2010), this framework of models provides an understanding of the place harm reduction has in working with people with addictions. According to Brickman and colleagues, in the *moral model*, people's problems are of their own making and they are responsible for solving them. Continuing problematic drug use is seen as a personal failure and the individual is to blame for their own problems. This view fails to recognize that drug use is exacerbated by social conditions and that not everyone has access to the same resources to manage or address drug use. The *medical model* focuses on addiction as a disease: people are victims of this disease and in need of treatment (Brickman et al., 1982). Individuals are responsible for neither the problem nor the solution but rather are victims of their circumstances. In the *enlightenment model*, sometimes better known as the spiritual model or 12-step program, individuals are responsible for their problems but not the solutions and need to surrender to a higher power to overcome their problems. In the *compensatory model*, individuals are not to be blamed for their problems but are responsible for the solutions. Marlatt and Witkiewitz (2010) suggest that harm reduction is consistent with the compensatory model.

A potential shortcoming of harm reduction is that solutions are viewed as the responsibility of the individual rather than a shared responsibility: this view fails to recognize the circumstances beyond individual control that shape drug use and efforts to reduce the harms of drug use (Pauly, 2008a).

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## *Nursing, Illegal Drug Use and Harm Reduction*

As identified at the beginning of this paper, nurses, regardless of the setting where they work, will probably encounter situations where drug use may be affecting the health and safety of individuals and families receiving care. One of the key values of ethical professional nursing practice is to promote the health and well-being of the recipients of nursing care regardless of age, gender, ethnicity and other socio-demographic characteristics (CNA, 2008). Outlined below are some scenarios that nurses might encounter and the benefits that a harm reduction approach might offer to promote health and reduce harms for individuals, families and communities.

**Scenario #1:** Sue is an RN who works in a busy inner-city emergency department. She routinely sees individuals who seek care for the consequences of drug use, including injection-related abscesses. Many of her colleagues have expressed their frustration at fixing these people up only to have them return with the same problem. The emergency department does not have an expressed philosophy of harm reduction. However, Sue is aware that injection-related complications could be reduced through the use of safer injection education. Nick arrives in the emergency department with a huge abscess on his inner arm; he has a fever and is sweating. He is angry and says he doesn't want to stay. Sue offers him a blanket and a sandwich, which he accepts. After eating, he seems calmer and says he feels better. After he is assessed and antibiotics are initiated, Sue wonders if this might be a good time to share some information that would help to prevent abscesses in the future.

**Scenario #2:** Mike is a public health nurse in a mid-sized urban centre. Through his work in local high schools, he is aware that many of the youth in the community may be using club drugs such as ecstasy. He is also concerned that most of the drug use education is provided by police in the schools and that the emphasis is on law enforcement and abstinence.

**Scenario #3:** Kim works at a primary health-care centre where many individuals seeking care are addicted to prescription drugs such as morphine, codeine and benzodiazepines. She is aware that initially many of these drugs were prescribed to these individuals, who often have histories of abuse and chronic pain. However, many individuals can no longer access these drugs through their physician so they are buying the drugs on the street.

**Scenario #4:** A group of public health nurses is aware of a growing problem of crack use. They are aware that cuts and burns on the lips and sharing pipes may be a source of transmission of HIV and HCV. The nurses have received repeated requests for crack pipes. Provincial guidelines support the distribution of crack pipes, so the nurses begin to distribute safer crack kits. However, the program is halted when city officials become aware of it.

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**Scenario #5:** Brenda works in a correctional facility. Many of the inmates have long histories of drug use and addiction. Although drug use is not permitted and many of the inmates go through withdrawal upon incarceration, there is still drug use on the premises. Brenda is aware that access to clean needles is extremely limited. She is aware of the increased risk of HIV infection associated with injection drug use and is concerned about the repeated sharing of syringes among inmates.

**Scenario #6:** A young woman named Sheryl is admitted to hospital with endocarditis. She is very pale and short of breath and her heart rate is fast. She is worried that her partner will be looking for her and that he will be upset because she will be unable to work while she is in hospital. She fears he will get physically violent; she says that in the past he has thrown her down the stairs. She tells the physicians in the emergency department, “I don’t think I can stay.” When Sheryl gets to the ward, one of the nurses hears a colleague remark, “Another drug user. Why do they do this to themselves?” as she shakes her head. The nurse assigned to care for Sheryl points her to her room and says, “I’m busy and I’ll be back later.” Sheryl responds by saying, “This place sucks. I’m out of here.”

In many situations, RNs have embraced harm reduction where it has the potential to promote health, reduce harm and enhance access to health care. This response is consistent with the values embedded in the CNA code of ethics, including the pursuit of health equity, human rights and social justice.

These six scenarios are examples of some of the diverse situations in which nurses have an opportunity to reduce the harms and negative consequences of drug use and to promote the health and well-being of those receiving care. RNs have recognized the need for a compassionate approach to caring for people who use drugs and preventing adverse consequences of drug use. In many situations, RNs have embraced harm reduction where it has the potential to promote health, reduce harm and enhance access to health care. This response is consistent with the values embedded in the CNA code of ethics, including the pursuit of health equity, human rights and social justice (CNA, 2008).

Nurses can influence the development of organizational (Fisk, 1998) and governmental policies related to harm reduction associated with illegal drug use. For example, nurses have assisted in the initiation and development of needle distribution and recovery programs and supervised injection sites (Gold, 2003; Griffiths, 2002; Kerr, Oleson & Wood, 2004; Kerr, Oleson, Tyndall, Montaner & Wood, 2005; Small, Palepu & Tyndall, 2006; Wood, Zettel & Stewart, 2003). The growth of these services has led to increased numbers of RNs working within harm reduction services, and using a harm reduction approach in other settings. Some nurses working in this area have made considerable efforts to document and make visible their work in harm reduction. For example, a growing number of descriptive papers illustrate nursing practice in harm reduction in emergency departments and other hospital departments (Mattinson & Hawthorne, 1996; McCall, 1999), methadone clinics (Mistral & Hollingworth, 2001), street outreach in urban and rural settings (Brown, 1998; Ruiterman & Biette,

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1973; Self & Peters, 2005), home care settings (Brennan & Giles, 1996; Giles & Brennan, 2001), heroin prescription trials (Plaza, Oviedo Joeques & March, 2007; van Beek, Kimber, Dakin & Gilmour, 2004), primary health-care centres, maternal and child care settings, and public and population health services (Carriere, 2008; Garm, 1999; Payne, 2007).

There has been limited research on nursing and harm reduction: only a few studies have been published on outreach nursing (e.g., Hilton, Thompson & Moore-Dempsey, 2009; Hilton, Thompson, Moore-Dempsey & Hutchinson, 2001), nursing practice in relation to methadone maintenance (e.g., Wilson, MacIntosh & Getty, 2007), supervised injection education (e.g., Wood, Wood, et al., 2008) and primary health care centres and supervised injection sites (e.g., Lightfoot et al., 2009; Pauly, 2008b). For example, Wood, Wood, et al. (2008) highlighted the important role of nurses in providing supervised injection education to individuals at increased risk of experiencing the harms associated with injection drug use. In these publications of nursing practice, a primary focus is the important role that nurses play in the delivery of harm reduction services through the development of caring and trusting relationships with the people accessing health-care services. A study of ethical nursing practice in inner-city health-care clinics in Western Canada found that when nurses used a harm reduction approach in their practice, access to health care was enhanced because of a change in the moral values of the nurses: for example, there was a shift from stigmatizing attitudes toward drug use and the people who use drugs to an attitude of respect for all people regardless of whether or not they used illegal drugs (Pauly, 2008b).

Nursing practice in harm reduction has been a prominent topic at the annual meetings of the Canadian Association of Nurses in AIDS Care. In recent years, there have been concerted efforts to enhance the visibility of nursing in, and the contribution of nursing to, the harm reduction movement through the active participation of nurses at IHRA conferences. Nursing satellite meetings were associated with the IHRA's conference in 2006 (Vancouver), 2007 (Warsaw), 2008 (Barcelona) and 2009 (Bangkok) and concurrent nursing sessions have been introduced into the main conference. A nursing plenary session was held at the 2008 conference in Barcelona. The *International Journal of Drug Policy*, the official journal of the IHRA, published its first special focus issue on harm reduction in nursing practice in June 2008 (Pauly & Goldstone, 2008).

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### III. Drug Policy Issues: Competing Discourses and Current Realities

Two dominant and competing discourses have been identified as shaping current drug policy: the health coalition and the crime coalition<sup>7</sup> (Stevens, 2007). In his article, Stevens contrasts the health coalition, which advocates for public health policies aimed at limiting the spread of HIV/AIDS through injection drug use, with the crime coalition, which focuses on the control of drug use and the criminalization of people who use drugs through law enforcement or punishment. The health coalition approach, according to Stevens, draws on substantial evidence that drug use has health consequences and that harm reduction strategies are effective in mitigating the health-related harms of drug use. Carstairs (2006) and Giffen, Endigott & Lambert (1991) show how, with the establishment of the Royal Canadian Mounted Police in 1920, the state put resources into enforcement rather than health care and treatment. Over the last 100 years, law enforcement and programs for the prevention and treatment of addiction have had a goal of abstinence.

In spite of growing evidence of the effectiveness of public health approaches such as harm reduction, drug policy continues to be underpinned by a prohibitionist and moral stance.

Hathaway (2001, 2002) observes that in spite of growing evidence of the effectiveness of public health approaches such as harm reduction, drug policy continues to be underpinned by a prohibitionist and moral stance. The tension between these two approaches is illustrated by the history of Canada's response to illegal drug use, which has been characterized as "panic and indifference" (Giffen et al., 1991), with certain types of evidence being used to create moral panic (e.g., Erickson, 1998). The emphasis on law enforcement has been supported by the selective use of evidence that has overestimated and simplified the relationship between drugs and crime (Stevens, 2007) and underestimated the link between crime, drugs and socio-economic deprivation (Seddon, 2006). A third emerging discourse is the human rights coalition, which focuses on the rights of people who use illegal drugs to access health and social services and fundamental rights enshrined in the Canadian Charter of Rights and Freedoms, such as life, liberty and security of the person.

Drug policy affects the delivery of nursing care to people experiencing substance use. A brief overview of the drug policy context at the international, national, provincial and municipal levels follows. The aim of this overview is to enrich the understanding of policy decision-makers within nursing of the factors that influence the work of RNs; this may influence the degree to which harm reduction strategies may be introduced and integrated into nursing care in a variety of settings.

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<sup>7</sup> The crime coalition refers to a focus on law enforcement as the primary public policy response to drug use.



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## *International Drug Policy*

The discovery and spread after the 15th century of the world's psychoactive resources – distilled alcohol, tea, coffee, cacao, coca, cannabis, opium and tobacco – has been called a “psychoactive revolution” (Davenport-Hines, 2001; Dikötter, Laamann & Zhou, 2004). The violence associated with currently prohibited drugs was associated with the importation and spread of tea in 18th-century England (Moxham, 2003) and alcohol in Canada and the United States in the early 20th century (Alexander, 1990; Gray, 1998). Opiates were widely used as a medical panacea in 19th-century Europe, North America and Asia before modern synthetic drugs were developed. Alexander (1990) argues that no epidemic of opiate or alcohol use ever existed; in the United States, it is probable that no more than one per cent of the population was opiate dependent. Nevertheless, the temperance movement of the 18th and 19th centuries arose as a response to the impact of alcohol on individuals and society. Social historians have argued that anti-opium and anti-alcohol movements in the late 19th and 20th centuries were mechanisms of social control (Alexander, 1990; Carstairs, 2006) and integral to political platforms in the United States and Canada (Alexander, 1990; Gray, 1998). As Boyd (1991) argues, drugs were prohibited, not on the basis of their pharmaceutical properties, but rather to control the moral erosion that was believed to be associated with drug use among marginalized groups.

The prohibition of currently illegal drugs began with the first international treaties in 1919 and has had periods of escalation, such as in the Reagan years of the 1970s when the current “war on drugs” was declared (Boyd, 1991; Gray, 1998). Subsequent treaties include the Single Convention on Narcotic Drugs (adopted in 1961 and amended by the 1972 Protocol), the Convention on Psychotropic Substances (adopted in 1971) and the Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances (adopted in 1988) (Giffen et al., 1991). The Economic and Social Council, the Commission on Narcotic Drugs, the International Narcotics Control Board and UNODC are involved in the functioning and oversight of these conventions. There are many criticisms of the current drug control regime, not the least of which is the charge that current drug control policies create a huge unregulated and expanding illegal drug market. A United Nations report estimated this market to be worth US\$320 billion annually (United Nations Office on Drugs and Crime [UNODC], 2005). The International Drug Policy Consortium (2007) cites the following concerns:

- The tone of the conventions is problematic. They characterize people who use drugs as “evil,” “devils” or “animals,” thereby justifying the view that “the harsher the penalty, the greater the deterrent.” Over 30 signatory countries retain the death penalty for drug use.
- The focus on crime and control promotes a law enforcement perspective, in part because the membership of the Commission on Narcotic Drugs is overwhelmingly drawn from foreign affairs and law enforcement agencies.
- There has been a failure to consider policy options to mitigate the spread of HIV transmission through injection drug use.

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- The response to drug-related crime and the escalation of violence is problematic.
  - There has been a failure to rebuild shattered societies (e.g., Columbia and coca, Afghanistan and opium).
  - There has been a failure to provide access to essential analgesia owing to overly rigid controls of controlled substances.
  - There has been a failure to protect human rights, including violations of cultural practices and environmental destruction owing to crop eradication programs.
  - Civil society has been minimally involved in the current policies.

In 1998, the 20th Special Session of the General Assembly of the United Nations declared its goal of substantially reducing drug demand and supply by the year 2008 (United Nations, 1998). In 2007 and 2008, in preparation for the 2008 review, regional consultations were held with civil society organizations in 13 cities, including Vancouver, BC, and nine regions in the world (Vienna NGO Committee on Narcotic Drugs, 2010). Two evaluations provide insights about and critiques of the findings of the consultations (Centre for Addictions Research of British Columbia, 2008; UNODC, 2009). These include tensions associated with continued reliance on law enforcement and supply reduction, the HIV and HCV epidemics in people who use injection drugs, the cost of incarceration of non-violent users of illegal drugs and the violation of human rights. The loss of potential tax revenue is another result of the current approach to drug control, and it is currently causing reconsideration of the status quo (Nasaw, 2009).

UNODC recently indicated that public health should be the first principle of drug control (UNODC, 2008). Although there have been charges that harm reduction initiatives such as Insite (a supervised injection facility in Vancouver) operate in contravention of international drug treaties, legal analysis (Malkin, Elliott & McRae, 2003) and the 2008 UNODC report indicate that such interpretations were never the intention of the drug conventions. In 2001, Portugal decriminalized (not legalized) the possession of all drugs for personal use and usage itself. Use and possession remain legally prohibited but violations are dealt with as administrative violations and are completely removed from the criminal realm. Trafficking remains a criminal offence. In a review of the experience with decriminalization in Portugal, Greenwald (2009) found that not only has usage not increased (Portugal has one of the lowest rates of use in the European Union), but drug tourism has not occurred, the numbers of sexually transmitted infections and deaths caused by drug usage have decreased, and access to drug treatment programs has increased. Popular and political support in Portugal for decriminalization remains high, although it is recognized that some efficiencies need to be introduced into the programs associated with decriminalization.



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## Canadian Drug Policy

In Canada, the *Controlled Drugs and Substances Act* (CDSA), which came into effect in 1996, sets out the framework for the “control, import, production, export, distribution and possession of psychoactive substances in Canada” (Collin, 2006b, p. 3). The first act to criminalize a drug in Canada was the 1908 *Opium Act*, in which the import, sale or manufacture of opiates for non-medical use was prohibited (Collin, 2006a).<sup>8</sup> The *Opium Act*, in hindsight, can be viewed as driven by the social tensions (e.g., racism) of the time (Boyd, 1991; Carstairs, 2006). Several legislative policies to control and regulate psychoactive substances were subsequently enacted, including the *Opium and Drug Act* (1911), the *Food and Drugs Act* (1920), the *Narcotic Control Act* (1961) and most recently, the CDSA.

Over the past 40 years, efforts to change drug policy and control the production, distribution and use of illegal drugs have met little success. For example, the Le Dain Commission of Inquiry into the Non-Medical Use of Drugs (1969-1972) recommended that cannabis be removed from the *Narcotic Control Act* and that the provinces implement controls on possession and cultivation similar to those governing the use of alcohol (Government of Canada, 1972). In 2000, the Senate Special Committee on Illegal Drugs was charged with conducting an exhaustive review of public policies related to marijuana (Collin, 2006b). The senate committee concluded that “cannabis should not be treated as a criminal issue but as a social and public health issue and that the drug should be legalized” (Collin, 2006b, p. 3). On the basis of this report, a number of bills to amend the act were put forward, without success. According to Collin, Prime Minister Stephen Harper, in a 2006 speech at the executive board meeting and legislative conference of the Canadian Professional Police Association, announced that his government would not pursue introduction of marijuana decriminalization legislation but would pursue tougher penalties, such as minimum mandatory sentencing and increased fines for marijuana growers and dealers (Collin, 2006b). This exemplifies the “tough on drugs” or “war on drugs” approach that emphasizes law enforcement as the dominant approach to reducing the harms of illegal drugs.

There has been very little evaluation of the effectiveness of law enforcement as an approach to controlling illegal drug use, and that there is evidence that suggests law enforcement is ineffective in reducing drug use and can contribute to harms, such as increased rates of HIV infection among people who use illegal drugs, especially in contained settings such as prisons.

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<sup>8</sup> Most of the information in this section was derived from two comprehensive papers on drug policy prepared by Collin (2006a, 2006b).

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## *Canada's National Drug Strategy*

The first national drug strategy, launched in 1987 and known as Canada's Drug Strategy, outlined a broad policy framework for prevention, treatment and reduction of the harms of substance use (legal and illegal) (Collin, 2006a). In 1998, the original six components of Canada's Drug Strategy were reformulated into the following four pillars: education and prevention, treatment and rehabilitation, harm reduction, and enforcement and control. However, consistent with previous budgetary trends, funding was substantially reduced, and advocates working in the field of substance use expressed concern that this was "the sunset of Canada's Drug Strategy" (Collin, 2006a, p. 5). In 2003, the Government of Canada renewed its commitment to Canada's Drug Strategy with \$245 million over the next five years (Collin, 2006a).

The new strategy to address illegal substance use in Canada reflects a move away from a public health approach and toward a crime prevention approach. In light of an international shift toward public health and harm reduction approaches, Canadian national policy is regressive.

In 1988, the Canadian Centre on Substance Abuse (CCSA) was created by an act of Parliament as the lead agency in the development of research and policy on substance use (Collin, 2006b). The centre is funded by – although intended to be at arm's length from – the federal government. The centre has led many national initiatives, such as an initiative to assess the costs of substance use (Rehm et al., 2006). It helped facilitate the development of a pan-Canadian framework to reduce the harm associated with alcohol and other drugs, including a National Treatment Strategy and a National Alcohol Strategy (CCSA, 2005). Eric Single, the founding director of policy and research at the centre, was an early contributor to discussions about definitions of harm reduction (Lenton & Single, 1998). CCSA took a lead role in developing principles of harm reduction that have been used internationally (CCSA, 1996). Harm reduction was a core principle of this framework. More recently, the centre has released a document describing harm reduction as a contentious issue but reaffirming the principles it outlined in 1996 and reviewing the evidence for harm reduction (Beirness, Jesseman, Notarandrea & Perron, 2008). The primary focus is on reducing the direct physical harms to individuals; the social determinants and other factors that increase vulnerability to the harms associated with drug use in populations are rarely mentioned.

Concerns have been raised by several high-profile government committees and the auditor general about the direction and effectiveness of Canada's Drug Strategy. In an analysis of the funding of drug policy initiatives, DeBeck, Wood, Montaner and Kerr (2006) found that 73 per cent of the money allocated to Canada's Drug Strategy in 2004-2005 to address the harms of illegal drugs was spent on law enforcement. DeBeck and colleagues pointed out that there has been very little evaluation of the effectiveness of law enforcement as an approach to controlling illegal drug use, and that there is

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evidence that suggests law enforcement is ineffective in reducing drug use and can contribute to harms, such as increased rates of HIV infection among people who use illegal drugs, especially in contained settings such as prisons (Friedman et al., 2006; Wood, Montaner, et al., 2005; Wood, Spittal, et al., 2004).

In 2007, Canada's Drug Strategy was renamed the National Anti-Drug Strategy. It includes a commitment to three pillars and areas for action: preventing illegal substance use, treating people with illegal drug dependencies, and combating production and distribution of illegal drugs. Harm reduction, the fourth pillar of the earlier strategy, was removed and Health Canada was no longer the sole lead agency. The National Anti-Drug Strategy is now a collaborative effort involving the Department of Justice, Public Safety Canada and Health Canada. Before this change, harm reduction initiatives had not been well funded but at least harm reduction was identified as a key element of a comprehensive national policy. The new strategy to address illegal substance use in Canada reflects a move away from a public health approach and toward a crime prevention approach. In light of an international shift toward public health and harm reduction approaches, Canadian national policy is regressive.

### *Provincial and Municipal Drug Policies*

In 2007, most provinces and territories – through the Federal/Provincial/Territorial Advisory Committee on AIDS and the Federal/Provincial/Territorial Committee on Substance Use and Abuse (composed of representatives of ministries of health across Canada) – officially endorsed harm reduction and highlighted their concerns about the absence of harm reduction from the 2007 National Anti-Drug Strategy. These endorsements and concerns were documented in letters to the co-chairs of the Pan-Canadian Public Health Network Council, including the head of the Public Health Agency of Canada.

Several Canadian provinces have actively embraced harm reduction policies. For example, the British Columbia Ministry of Health developed three key documents outlining the provincial government's position and endorsement of harm reduction as part of a broader strategy to reduce and prevent the harms associated with substance use (BC Ministry of Health, 2006; BC Ministry of Health Services, 2004; Centre for Addictions Research of British Columbia, 2006). The following definition of harm reduction has been put forth: "At the practical level, the aim of harm reduction is to reduce the more immediate harmful consequences of drug use through pragmatic, realistic and low threshold programs. Examples of the more widely known harm reduction strategies are needle [distribution and recovery] programs, methadone maintenance treatment, outreach and education programs for high risk populations, law enforcement cooperation, medical prescription of heroin and other drugs, and supervised consumption facilities" (BC Ministry of Health, 2006, p. 4).

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In collaboration with the Ministry of Health, the BC Harm Reduction Strategies and Services Committee has produced documents on best practices to guide implementation of harm reduction (Chandler, 2008). Vancouver is one of the major Canadian cities that have adopted harm reduction policies and supported the development of harm reduction initiatives (MacPherson, 2001). The supervised injection facility in Vancouver was launched and continues to operate

Nurses in practice, administration and education [are] caught between criminalization of drug use and harm reduction as a public health response to drug use.

with the leadership of successive mayors (Boyd, MacPherson & Osborn, 2009; Campbell, Boyd & Culbert, 2009; Small et al., 2006). Other municipal governments have rejected harm reduction approaches, often in spite of explicit protests from public health officers (Symington, 2007). The public health officers of British Columbia (Health Officers Council of British Columbia, 2005) and others (City of Vancouver, 2005; King County Bar Association, 2005; Royal Society for the Arts, 2007; Transform Drug Policy Foundation, 2005, 2009) have argued for a regulated market for all psychoactive drugs. For example, each drug would be regulated according to its risk to health; cannabis would be available in mechanisms similar to tobacco but with very heavy penalties for selling to minors, and heroin would be available by prescription through specialized addiction services.

Of particular concern to nurses is that there is a patchwork of policies related to harm reduction and substance use in health-care organizations. Street nurse programs, community health programs and primary health-care services have, in some cases, adopted harm reduction as either a philosophy or policy and offer harm reduction services. According to Rachlis, Kerr, Montaner and Wood (2009), abstinence-based policies in hospital settings are the norm and have been associated with patients leaving against medical advice – and some organizations have policies that discharge or even evict patients for illegal drug use.

International drug policy bodies that squarely focused on a crime coalition approach in the past have begun to acknowledge and support harm reduction as part of a public health response. At the same time, Canadian federal government initiatives and directives demonstrate loss of action on public health and harm reduction in drug policy. Provincial support in Canada for harm reduction has increased at the same time as federal opposition to harm reduction has increased, and harm reduction policies or programs remain absent from acute care settings. This has created a policy schism that leaves nurses in practice, administration and education caught between criminalization of drug use and harm reduction as a public health response to drug use. Further, crime coalition approaches increase the harms of drug use, especially for those affected by poverty and drug use. Drug policy is one, albeit important, aspect of addressing the root causes of health inequities. Professional nursing bodies can play an important role in assisting nurses at all levels through careful consideration and development of policies related to harm reduction.

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## IV. Review of Evidence Base for Harm Reduction Strategies

### *Literature Review Methodology*

Reviewing the evidence base for harm reduction is particularly relevant in light of the professional and ethical standards that guide nurses to use current evidence in their practice. According to the CNA code of ethics (CNA, 2008), RNs, in the provision of safe, competent and ethical care, have a responsibility to use current research in their practice. The professional standards of the College of Registered Nurses of British Columbia (CRNBC) indicate that nurses should base their practice on the best evidence available from nursing and other sciences (College of Registered Nurses of British Columbia, 2010).

The review of evidence for this paper drew on aspects of a scoping review methodology described by Arksey and O'Malley (2005). "Scoping reviews" are used to rapidly map rather than evaluate available evidence (Mays, Roberts & Popay, 2001). A broad range of research methodologies was included in the review, as the intention was to map existing research and identify gaps in research. Scoping reviews begin with one or more research questions that can be refined as the project progresses. This is unlike the "systematic review" methodology in which research questions are clearly defined at the start of the project. In developing the research questions for the scoping review, the original questions were refined and reframed as: What is known in the peer-reviewed literature about the effectiveness of harm reduction strategies for reducing the harms associated with illegal drug use? Incorporated into the review were existing systematic reviews and meta-analyses. In contrast, systematic reviews typically consider studies using a narrow range of research methodologies and the most commonly randomized controlled trials in order to assess the effectiveness of interventions.

Only published, peer-reviewed articles were included in the literature review for each topic area. The following databases were searched: Google Scholar, ScienceDirect, Health Source: Nursing/Academic Edition, CINAHL, JSTOR, PubMed and Cochrane Reviews. The year 2001 was used as a cut-off date, but seminal articles published before this date were included. In part, 2001 was chosen as the cut-off date because an earlier review of harm reduction relevant to HIV infection and illegal drug use covered the preceding years (Hilton, Thompson, Moore-Dempsey & Janzen, 2001). A broad range of search terms related to harm reduction were used, including "nursing and harm reduction," "drug policy and harm reduction," "peer-based strategies," "outreach," "supervised injection sites," "supervised consumption rooms," "methadone maintenance," "overdose and injection drug use," "overdose and prevention," "heroin prescription," "needle exchange services," "needle exchange and secondary distribution," "injection drug use and abscesses," "vulnerability and illegal drug use," "crack use and harm reduction," "Housing First" and "harm reduction and housing." Reference lists were developed for each search strategy included in the review.

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## *Harm Reduction Strategies and Interventions: Current Status and Evidence*

The evidence for programs that have harm reduction as a primary goal was reviewed. This section describes briefly the following harm reduction strategies and provides an overview of current evidence: needle distribution and recovery programs, outreach strategies, overdose prevention strategies, methadone use for detoxification and maintenance therapy, heroin maintenance therapy, supervised consumption sites and supervised injection sites, safer crack use kits and supervised inhalation rooms, and Housing First.<sup>9</sup>

### *Needle distribution and recovery programs*

The primary goal of needle distribution and recovery programs is to interrupt the spread of blood-borne pathogens such as HIV, HCV and the hepatitis B virus (HBV) through provision of sterile injection equipment to, and recovery of used injection equipment from, individuals who inject drugs. Although some programs may offer distribution and recovery, these functions may be separated in that some may only provide sterile equipment while others focus more on recovery. Secondary goals of needle distribution and recovery programs are to increase access to treatment and other supports, to provide education and information about safer injection practices and safer sex and to link hard-to-reach populations to services (Ritter & Cameron, 2006). Needle distribution and recovery programs were initiated in the early 1980s to interrupt the spread of HIV; they were first developed in Amsterdam, followed by North America, other parts of Europe and Australia (Friedman et al., 2007; Sherman & Purchase, 2001; Vlahov et al., 2001).

Needle distribution and recovery services have not been found to increase drug use, initiation into drug use or injection drug use, nor have they been found to increase rates of crime, public disorder or public nuisance, such as discarded needles.

Research on needle distribution and recovery programs has examined HIV seroconversion, HIV seroprevalence, changes in HIV risk behaviours, cost-effectiveness, and iatrogenic effects using a variety of research designs (Gibson, Flynn & Perales, 2001; Leonard, Forrester, Navarro, Hansen & Doucet, 2008; MacDonald, Law, Kaldor, Hales & Dore, 2003; Ritter & Cameron, 2006; Wodak & Cooney, 2005, 2006). Findings of several ecological studies have suggested that HIV seroprevalence is lower in cities with needle distribution and recovery services. In a review of 1997-1998 data, Leonard et al. (2008) concluded that needle distribution and recovery programs were not protective against infection with HIV, HBV or HCV because of inconclusive evidence in studies of HIV

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<sup>9</sup> Several interventions, including street drug testing for purity/adulterants and early warning systems, have not been included in the discussion of harm reduction strategies. For a brief discussion of these, see BC Ministry of Health (2006) and Benschop, Rabes & Korf, 2002. The rationale for not including these types of interventions is that nurses have limited involvement in the delivery of such programs and these programs have been less controversial.



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seroprevalence and seroconversion. However, other current and comprehensive reviews (Gibson et al., 2001; Ritter & Cameron, 2006; Wodak & Cooney, 2005, 2006) have suggested that differences in the findings related to seroprevalence in cities with and without needle distribution and recovery programs, and in seroconversion rates between users and non-users of needle distribution and recovery programs, are more likely due to differences in research design, as well as confounding factors such as differences in access to syringes in pharmacy programs, the nature of drug use, and characteristics of the users of needle distribution and recovery services. For example, in Montreal and Vancouver, outbreaks of HIV, despite the presence of programs, were probably due to the prevalence of cocaine use, which requires more frequent injecting and thus involves an increased transmission risk. Several studies have shown that needle distribution and recovery programs attract individuals whose living situations (e.g., homeless or unstably housed) and drug-use patterns elevate their risk of acquiring a blood-borne infection (Corneil et al., 2006; Des Jarlais et al., 2005; Fisher, Reynolds & Harbke, 2002; Hagan et al., 2002). Several authors have concluded that needle distribution and recovery alone is not enough to protect against HIV infection (Gibson et al., 2001; Ritter & Cameron, 2006; Strathdee et al., 1997).

Although the evidence concerning reductions in the rate of HIV seroconversion and seroprevalence appears to be inconclusive, several reviewers have concluded that needle distribution and recovery programs are effective in reducing HIV risk behaviours (such as needle sharing and reuse) that contribute to HIV transmission (Gibson et al., 2001; Palmateer et al., 2010; Ritter & Cameron, 2006; Wodak & Cooney, 2005, 2006). Three studies found increased reuse of injecting equipment when local needle distribution and recovery services closed (Broadhead, Van Hulst & Heckathorn, 1999; Ivsins et al., 2010; MacNeil & Pauly, 2010a).

Although concerns about negative, or iatrogenic, effects being associated with needle distribution and recovery programs have been raised, none has been reported in previously conducted research (Fisher, Fenaughty, Cagle & Wells, 2003; Marx et al., 2000; Ritter & Cameron, 2006; Strathdee & Vlahov, 2001; Wodak & Cooney, 2005, 2006). Needle distribution and recovery services have not been found to increase drug use, initiation into drug use or injection drug use, nor have they been found to increase rates of crime, public disorder or public nuisance, such as discarded needles. Needle distribution and recovery services have been found to be cost-effective on the basis of estimates of the number of HIV infections averted by implementation of distribution and recovery exchange services. In all 10 studies reviewed by Wodak and Cooney (2006), needle distribution and recovery programs were found to be cost-effective and cost-saving because the costs of such programs were lower than the costs of treating the estimated number of averted infections.

Numerous studies have identified secondary and unanticipated benefits of needle distribution and recovery programs (Wodak & Cooney, 2005, 2006), such as increased access to health services (particularly nursing services); housing referrals; drug treatment; counselling; education; and testing for HIV, HCV and tuberculosis (Heimer, 1998; MacNeil & Pauly, 2010b; Masson et al., 2007; Strathdee et al., 2006). Given that many of the people who use needle distribution and recovery

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services are hidden or hard-to-reach individuals who lack access to health-care services, such benefits are particularly important.

Most of the research on needle distribution and recovery services to date has focused on effectiveness; less attention has been given to different models for the delivery of these services, including peer outreach;<sup>10</sup> mobile services; fixed-site services; and distribution through pharmacies, hospitals or secondary means (Miller et al., 2002; Riley et al., 2000; Strike, Challacombe, Myers & Millson, 2002; Strike et al., 2006). Several authors found that fixed sites, mobile sites and pharmacy services reach different groups of people, suggesting that different types of services are needed. Fixed sites have the advantage of providing more confidential spaces for counselling and generate a higher rate of referrals (Strike et al., 2002). Mobile services tend to reach users at higher risk who may not otherwise access services, but provide less space for confidential interactions. Some initial investigations of secondary distribution by people who use injection drugs have been undertaken to determine their impact on reducing risk behaviours compared with established needle distribution and recovery services (Huo, Bailey, Hershow & Ouellet, 2005; Snead et al., 2003; Tyndall et al., 2002). To address the increased risk of HIV transmission in prisons, prison-based needle distribution and recovery programs were implemented in the 1990s, first in Switzerland and then in other parts of Europe (Dolan, Rutter & Wodak, 2003). In prisons, needle distribution and recovery services are provided by a variety of mechanisms, including vending machines, health-care staff, corrections staff and outside workers. Evaluations of prison-based needle distribution and recovery programs to date have found evidence of reduced risk behaviours without unintended consequences such as increased injection drug use, or the use of syringes as weapons (Dolan et al., 2003; Lines et al., 2006; Wodak & Cooney, 2006).

In spite of the evidence supporting the effectiveness, safety and cost-effectiveness of needle distribution and recovery services, these services often face opposition that results in limitations on the delivery of services and, in some cases, discontinuation of services.

In spite of the evidence supporting the effectiveness, safety and cost-effectiveness of needle distribution and recovery services, these services often face opposition that results in limitations on the delivery of services and, in some cases, discontinuation of services (Broadhead et al, 1999; MacNeil & Pauly, 2010a; Tempalski, Friedman, Keem, Cooper & Friedman, 2007). “Not-in-my-backyard” objections from neighbours, political pressure, protests by community coalitions, and activism have been found to override client needs as the primary predictors of the presence of needle distribution and recovery services, resulting in their uneven distribution (Downing et al., 2005; Tempalski, Flom, et al., 2007). In short, social and political processes

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<sup>10</sup> Outreach, including peer outreach, will be addressed more specifically in the section on outreach strategies.



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play a critical role in community acceptance or rejection of needle distribution and recovery services and other services for people who use drugs.

### *Outreach strategies*

Outreach is a strategy designed to reach hidden or partially hidden populations who use illegal drugs in their own community (Needle et al., 2004, 2005). The most common outreach models include provision of information about safer use and clean injecting equipment; access to testing; and referral to health, social and drug treatment services (Ritter & Cameron, 2006). Outreach may be provided by peers who have past or current experience with drug use, by professional health or social service outreach workers or by a combination of these (Coyle, Needle & Normand, 1998; Latkin 1998; Needle et al., 2004, 2005). Peer-based models have been demonstrated to be more effective than traditional outreach approaches (Broadhead et al., 1998).

In the first comprehensive review of outreach programs, Coyle et al. (1998) included 36 studies that used primarily one-group pre-test, post-test or quasi-experimental designs and assessed them according to standards enumerated by A. B. Hill in 1971 (p. 27) for evaluating public health interventions. These authors found consistency in the results of the studies. Five major risk behaviours were reduced: “stopping injection use; reducing frequency of injection; reducing reuse of syringes; reducing reuse of other equipment (cookers, cotton, rinse water); and reducing crack use” (p. 23). They also found consistency in the research results that showed a significant effect of the programs on three protective behaviours: “(1) more frequent needle disinfection, (2) entry into drug treatment, and (3) increases in condom use” (p. 23).

In 2004, in conjunction with the World Health Organization, the same group of authors conducted an updated evidentiary review to assess the effectiveness of community-based outreach strategies for reaching hard-to-reach and hidden populations who use injection drugs (Needle et al., 2004). Specifically, they looked at whether community-based strategies reduced HIV risk behaviours and whether these changes lowered rates of HIV infection. As in their previous review, Needle et al. (2004) employed Hill’s criteria. Although it is often difficult to determine how many people who use injection drugs have been reached, the authors concluded that community-based outreach had expanded and extended the reach of traditional health and social services to those at risk of harms associated with injection drug use. Of note in this review is the inclusion of evidence that street outreach was a factor in facilitating entry into and continuation of methadone maintenance therapy. As well, mobile testing for HIV was found to be more effective than referral to services for HIV testing. There was also some evidence that street outreach does increase HIV testing through referrals. An important further conclusion is that community-based interventions are relatively inexpensive and effective and can be a first step in offering HIV prevention, treatment and care, as well as access to other programs. Cost-effectiveness is primarily achieved by prevention of HIV infections (Ritter &

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Cameron, 2006). However, as Needle et al. (2005) observed, there is still a gap in many countries between the people who would benefit from outreach services and those who receive such services.

Social networks have been identified as an important means by which to reach people who use drugs (Broadhead et al., 1998; Latkin, Hua & Davey, 2004). Drug user groups, with a focus on activism, advocacy and sometimes harm reduction services, are examples of self-organizing social networks that address health and community issues (Crofts & Herkt, 1993; Kerr, Oleson, et al., 2004; Kerr, Small, et al., 2006). Friedman et al. (2007) pointed to the potential effectiveness of drug user groups in addressing the stigma of drug use and advocating for the rights of those who use drugs.

In Canada, particularly in Vancouver, which has been a site of open illegal drug use and activity, RNs are among the workers providing outreach services in downtown areas known for drug use (Banks & Loftus, 1991; Giles & Brennan, 2001). The street nurse program in Vancouver, which focuses on prevention of HIV infection and sexually transmitted diseases with hard-to-reach groups within a framework of harm reduction and health promotion, was formally evaluated in the late 1990s (Hilton et al., 2009; Hilton, Thompson, Moore-Dempsey & Hutchinson, 2001). The evaluation focused on the nature of the nurses' work, the challenges they face, the fit of this program with other programs and the impact of their work (Hilton, Thompson, Moore-Dempsey & Hutchinson, 2001). Drawing on qualitative interviews and focus group data from clients, street nurses and others, the authors described nursing work according to five themes: (1) reaching marginalized populations at high risk of acquiring HIV infection and sexually transmitted diseases; (2) building and maintaining trust, respect and acceptance; (3) working to prevent HIV infections and sexually transmitted diseases, detect them early, treat them and provide referrals; (4) connecting clients with the health-care system; and (5) influencing the system and colleagues to be responsive. The nurses' work was also described as having a positive impact on clients' knowledge, providing access to harm reduction supplies, connecting clients to help, providing clients with a sense of support and helping them to change their drug use and health behaviours.

An important further conclusion is that community-based interventions are relatively inexpensive and effective and can be a first step in offering HIV prevention, treatment and care, as well as access to other programs.

### *Overdose prevention strategies*

Overdoses from heroin often do not occur until 1-3 hours after injection (Marlatt & Witkiewitz, 2010). Overdose deaths often occur in the presence of other people (Marlatt & Witkiewitz, 2010) and can be prevented. Naloxone (Narcan®) can be used to reverse heroin overdoses, is relatively inexpensive and does not have the potential for abuse. It is generally available in health-care facilities and administered by health-care providers. In the United States, several programs provide overdose prevention education

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to people who use drugs, including information on how to assess a possible overdose, and education of peers in how to administer naloxone. It is most commonly given intramuscularly, although trials are underway to evaluate the effectiveness of intranasal administration. Overdose prevention education includes information on the signs and symptoms of overdose, including early intervention, and can be an important aspect of peer education. Only one study was found that assessed the effectiveness of naloxone administration in combination with training in cardiopulmonary resuscitation in preventing overdose deaths (Seal et al., 2005). In this small study of 12 heroin users and their partners, none of the 24 study participants witnessed overdoses resulting in death.

### *Methadone use for detoxification and maintenance therapy*

Methadone is a widely studied treatment proven to be safe and effective for treating opiate addiction. Methadone can be used to relieve withdrawal symptoms during detoxification, or it can be used as a maintenance therapy to help individuals living with opiate addiction to remain in treatment and reduce their heroin use and criminal activity. Thirteen systematic reviews, six meta-analyses, six randomized controlled trials, one economic evaluation and six nonrandomized trials were included in the review of the evidence concerning methadone maintenance therapy.

For detoxification purposes, methadone has been found to be superior to placebo (Amato, Davoli, Minozzi, Ali & Ferri, 2005; Amato, Davoli, Perucci, et al., 2005), clonidine and lofexidine (Gowing, Farrel, Ali & White, 2009). The addition of psychosocial treatment can help increase the percentage of participants completing detoxification (Amato et al., 2008). For maintenance, methadone is more effective than placebo, detoxification, drug-free rehabilitation and Levo-alpha-acetylmethadol (LAAM) therapy at retaining patients in treatment (Amato, Davoli, Minozzi, et al., 2005; Amato, Davoli, Perucci, et al., 2005; Connock et al., 2007; Glanz, Klawansky, McAullife & Chalmers, 1997; Johansson, Berglund & Lindgren, 2007; Mattick, Breen, Kimber & Davoli, 2009): better outcomes are achieved with higher doses of methadone than with lower doses (Faggiano, Vigna-Taglianti, Versino & Lemma, 2003; Farré, Mas, Torrens, Moreno & Cami, 2002). LAAM (Amato, Davoli, Perucci, et al., 2005; Clark et al., 2002; Glanz et al., 1997) and buprenorphine has been shown to be slightly more effective than lower doses of methadone at reducing heroin use (Barnett, Rodgers & Bloch, 2001).

Three reports outlining the role and contribution of nurses in methadone maintenance programs were identified in the literature review. Mistral and Hollingworth (2001) and Wilson et al. (2007) describe the role of nurses in a methadone clinic and their contribution to the program through the development of relationships and interactions with clients. Loth, Schippers, Hart & van de Wijngaart (2007) describe an action research project in which nurses were encouraged to reflect on the process of providing nursing care as a means of gaining insight into strategies to enhance the functioning of the clinic. The Registered Nurses' Association of Ontario has developed best practices guidelines to assist nurses to support people on methadone maintenance therapy (Registered Nurses' Association of Ontario, 2009).

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## *Heroin maintenance therapy*

Heroin maintenance, a cost-effective therapy for individuals living with a chronic opiate (heroin) addiction, can help reduce illegal heroin use and reduce criminal activity.

Prescription heroin programs or clinical trials have been or are being implemented in Australia, Belgium, Canada, France, Germany, Holland, Spain, Switzerland and the United Kingdom (Fischer, Rehm, Kirst, et al., 2002; Plaza et al., 2007). Ten papers were included in the review of the evidence regarding the effects of heroin maintenance therapy: two systematic reviews, seven randomized controlled trials and one economic evaluation. The evidence shows that heroin

prescription can help recipients to use less illegal heroin and engage in less criminal activity than people not receiving this treatment (Ferri, Davoli & Perucci, 2006; Hartnoll et al., 1980; March, Oviedo-Joekes, Perea-Milla, Carrasco & PEPSA Team, 2006; Perneger, Giner, del Rio & Mino, 1998; van den Brink et al., 2003). Dijkgraaf et al. (2005) found that heroin prescription is cost-effective.

In a randomized controlled trial in Vancouver and Montreal known as the North American Opiate Medication Initiative, or NAOMI, heroin-assisted therapy was compared with methadone maintenance treatment (Oviedo-Joekes et al., 2009). Similar to previous studies, these and other authors found that participants had higher retention rates than people in methadone maintenance programs, used less illicit heroin, engaged in less crime and had improved psychological health. In addition, there were no negative impacts on the surrounding neighbourhood (Lasnier, Brochu, Boyd & Fischer, 2010, Oviedo-Joekes et al, 2010). In both North American and British trials, evaluating the use of methadone and heroin prescription reported that, in the long term, injectable diacetylmorphine (the active ingredient of heroin) was more effective than oral methadone for injectors of heroin who had “failed” other treatment interventions (Oviedo-Jokes et al., 2009; Strang et al., 2010).

As Berridge (2009) writes,

The rise and fall of methods of treatment in this controversial area owe their rationale to evidence, but they also often owe more to the politics of the situation – to the context within which the evidence is received and to the interests that are prepared to support or oppose it. (p. 821)

Heroin prescription clinics are frequently staffed by RNs. Only one study was found that specifically addressed the role of RNs in heroin prescription programs (Plaza et al., 2007). The authors highlighted the central role of nurses in a heroin maintenance program in developing trust and facilitating care for the people enrolled in the service.

The evidence shows that heroin prescription can help recipients to use less illegal heroin and engage in less criminal activity than people not receiving this treatment.

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### *Supervised consumption sites and supervised injection sites*

There are approximately 65 supervised consumption sites or supervised injection sites in Europe (Germany, Luxembourg, the Netherlands, Norway, Spain and Switzerland), Australia and Canada (Hedrich 2004; Independent Working Group, 2006). “Drug consumption facilities or rooms (DCRs) are legally sanctioned low threshold facilities which allow the hygienic consumption of pre-obtained drugs under professional supervision in a non-judgemental environment” (Kimber, Dolan, Van Beek, Hedrich & Zurhold, 2003, p. 227). A wide range of terms are used to refer to such centres, including “supervised injecting centres,” “safe(r) injecting rooms,” “fixing rooms,” “drug consumption rooms” or facilities, or “medically supervised injecting centres” (Independent Working Group, 2006, p. 3). The term “supervised injection site or centre” is used for sites where the focus is on supervision of drug injection, whereas the term “supervised consumption site” is used for facilities that also provide supervision of the consumption of inhaled drugs. Supervised injection sites have been proposed as a means of addressing the following objectives (Fischer, Rehm, Kim & Robins, 2002; Kimber et al., 2003):

- reducing fatal and nonfatal overdoses;
- reducing transmission of blood-borne viruses (HIV, HCV);
- reducing risk behaviours for transmission of blood-borne viruses;
- increasing access to health and social services for hard-to-reach populations through connections with health-care professionals; and
- reducing public disorder, including reducing discarded equipment, public injecting and open drug dealing.

Before 2002, there were no published systematic evaluations of the effectiveness with which such sites were meeting the objectives set out for them (Broadhead, Kerr, Grund & Altice, 2002).

### ***Reduced overdose deaths***

As of 2008, no overdose death has been reported at any supervised consumption site anywhere in the world (Kerr, Tyndall, Lai, Montaner & Wood, 2006; Kimber et al., 2003; Kimber, Dolan & Wodak, 2005; Milloy, Kerr, Tyndall, Montaner & Wood, 2008; van Beek et al., 2004). At Insite (Vancouver), 45 per cent of the overdose events were considered potentially fatal, requiring administration of naloxone, a 911 call and/or an ambulance (Milloy, Kerr, et al., 2008). These authors suggest that, on the basis of projections of these data, approximately

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2-12 deaths per year may have been prevented in Vancouver since the opening of the program in March 2003. Nurses in supervised injection sites trained in airway management, oxygen and naloxone administration are often able to identify and intervene in overdose events earlier than in the community, which may account for the improved outcomes at these sites and reduced hospitalizations (Kimber et al., 2005). In addition, RNs provide safer injection education, which may play a role in reducing risk behaviours associated with overdose outside the clinic (Milloy, Kerr, et al., 2008).

In a study of Insite clients, Petrar et al. (2007) found that Insite plays a mediating role in reducing the risks of public injecting, such as the need to rush injection for fear of being arrested. In another study, the authors reported that Insite helped mediate the risks associated with overdose, such as injecting alone or with strangers (Kerr, Small, Moore & Wood, 2007). In particular, an important benefit of the site identified by participants was the immediate emergency response of the nurses, which contrasted with lack of observation of the event and difficulties and delays in getting emergency care on the street.

### ***Reduced risk behaviours and reduced transmission of blood-borne infections***

There is no evidence that supervised injection sites directly reduce transmission of HIV, HCV and other blood-borne viruses. The main mechanism by which supervised injection sites might reduce transmission of blood-borne infections is modification of risk behaviours, such as needle sharing. At Insite, use of the facility has been associated with reductions in HIV risk behaviours (Kerr, Tyndall, Li, Montaner & Wood, 2005; Wood, Tyndall, Stoltz, Small, Lloyd-Smith, et al., 2005). No instances of syringe sharing have been reported at Insite. In a survey of Insite clients, Petrar et al. (2007) found that 75 per cent of clients reported changes in their injecting behaviours, including less rushed injecting, fewer public injections, decreased reuse of syringes, increased likelihood of using clean water, increased likelihood of using a clean injection site, and increased likelihood of properly disposing of syringes after use. In Germany, an increased frequency of visits to the supervised injection site was associated with reductions in risk behaviours (Stoever, 2002). In addition, those who attend supervised injection sites receive education on safer injection, which can also reduce HIV risk behaviours (Wood, Tyndall, Stoltz, Small, Zhang, et al., 2005). At Insite, one in three users of the facility received education on safer injection (Wood, Tyndall, Stoltz, Small, Zhang, et al., 2005). Nurses play a key role in the provision of education on safer injection and are reaching almost half of the users of this facility (Wood, Wood, et al., 2008).

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### ***Increased access to health and addiction care***

Evaluations of the supervised injection sites in Sydney, Australia, and Vancouver included assessments of referrals at each site as an indicator of increasing contact of users of the site with service providers. Tyndall et al. (2006) reported that, at the Vancouver site, between March 2004 and April 2005, 2,171 referrals were made, either to another staff member at the supervised injection site or to counsellors with other organizations. The most frequent type of referral (37 per cent) was for addiction counselling. Other referrals by Insite nurses were to community health centres (16 per cent), hospital emergency departments (11.3 per cent), detoxification facilities (11.7 per cent), other community services (9.4 per cent), housing services (9.0 per cent), methadone maintenance programs (3.7 per cent) and recovery house programs (2.7 per cent). It is not known how many clients made contact with the agencies to which they were referred. In a further analysis of Insite data, Wood, Tyndall, Zhang, et al. (2006) reported that weekly use of the supervised injection site and contact with the site's addictions counsellor were associated with a more rapid entry into detoxification programs. Wood, Tyndall, Zhang, Montaner and Kerr (2007) analyzed data linked to residential treatment databases and reported that the opening of Insite was associated with a 30 per cent increase in use of detoxification services, and that this increase was associated with initiation of longer-term treatment and less use of the supervised injection site. Van Beek (2003), in an evaluation of the Sydney supervised injection site, reported that there had been more than 1,800 referrals to health and social services in the first two years of the program. Forty-four per cent of these referrals were for drug treatment and rehabilitation services, and 31 per cent were for nearby primary medical care services.

Vancouver's Insite was seen to have a positive impact on public disorder, with reductions in the frequency of open public injecting and in the number of discarded syringes and drug-related paraphernalia in nearby public spaces; in addition, drug dealing was not observed to have increased in the area around the site.

### ***Improving public order***

The impact of supervised consumption sites on public order has been studied in relation to changes in the frequency of open public injection, littering and loitering, drug-related crime and drug use in the community. Vancouver's Insite was seen to have a positive impact on public disorder, with reductions in the frequency of open public injecting and in the number of discarded syringes and drug-related paraphernalia in nearby public spaces; in addition, drug dealing was not observed to have increased in the area around the site (Wood, Kerr, et al., 2004; Wood, Tyndall, Lai, Montaner & Kerr, 2006). In Sydney, a time-series design was used to monitor the impact of the supervised injection site on crime and drug loitering near the site (Freeman et al., 2005). There was no evidence that the Australian site had either a positive or negative impact on drug-related crime, and no increase in drug-related loitering

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was reported. Van der Poel, Barendregt and van de Mheen (2003), in a survey of people who used supervised consumption sites in Rotterdam, the Netherlands, reported less frequent open public drug use among people who use drugs and have access to safe consumption sites, with some decreases in drug use. Similarly, Petrar et al. (2007) found that 71 per cent of users of Insite indicated that they injected less outdoors, and 56 per cent reported less unsafe syringe disposal. Factors found to limit the use of Insite included travel to Insite, the site's limited operating hours (18 hours/day) and wait times to access Insite. In a survey of 39 drug consumption rooms in the Netherlands, Germany, Spain and Switzerland in 1999-2000 by Kimber et al. (2005), six of the centres reported an increase in drug dealing in the vicinity of the site, and two of these reported an additional negative impact: increase in the frequency of petty criminal activity or aggressive incidents among clients. In an unpublished review, Hedrich (2004) reported that such problems seem to be more likely when the service is not meeting local needs (e.g., when wait times are long or when the service lacks the capacity to monitor activity outside the site).

### *Professional and public opinion*

Results from a stratified random sample of Ontario residents suggested that “individuals who support other harm reduction strategies, more liberal drug policies and who view illicit drug users as deserving of social and health assistance, are significantly more likely to support SIFs [supervised injection facilities] and HAT [heroin-assisted therapy]” (Cruz, Patra, Fischer, Rehm & Kalousek, 2007, p. 59). In both Canada and Australia, public opinion concerning the sites has been found to be positive (Angus Reid Public Opinion, 2010; Salmon, Thein, Kimber, Kaldor & Maher, 2007). Numerous health professionals and community organizations have endorsed Insite, including the British Columbia Nurses' Union, the Canadian Medical Association, the Canadian Nurses Association and the Family Physicians of Canada (British Columbia Nurses' Union, 2008; Canadian Medical Association, 2010; Dooling & Rachlis, 2010; Hwang, 2007; National Specialty Society for Community Medicine, 2009; Smadu, 2008).

Numerous health professionals and community organizations have endorsed Insite, including the British Columbia Nurses' Union, the Canadian Medical Association, the Canadian Nurses Association and the Family Physicians of Canada.

### *External evaluation of evidence from Insite*

In March 2008, an external advisory committee of experts appointed by Health Canada released a comprehensive review and evaluation of the evidence related to Insite in Vancouver and other supervised injection sites (Expert Advisory Committee, 2008). The expert panel reviewed published and unpublished research on Insite as well as international evidence on supervised injections sites in



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Australia and other European countries. They concluded that Insite has had a positive impact on the health of the community, the health of the people who use it, residents, service providers and local business owners. They found that there was strong support for Insite among business owners, service providers and residents in the neighbourhood, and that Insite has produced significant cost savings for taxpayers, decreased risk behaviours associated with the spread of HIV, reduced the subsequent costs of HIV treatment and prevented deaths from drug overdose. In addition, no adverse effects from Insite were found on drug use patterns, crime or public disorder. Two limitations of the research noted by the expert panel were the lack of comparison studies to other methods, such as outreach, that might increase referrals, and the lack of a comparison or control group to assess differences in risk behaviours, such as needle sharing.

### *Supervised injection site models and nursing*

Internationally, there are a range of models for supervised injection sites, with variations in the hours of operation, staffing, facilities, services and rules (Kimber et al., 2005). On the basis of a survey of 15 drug consumption rooms, Kimber et al. (2005) reported that social workers were the type of professional most frequently employed at these sites, followed by nurses. In Canada, the injection room at Insite is staffed by RNs. Van Beek (2004) described the development of the supervised injection site in Sydney, and highlighted the role of nurses. Although in descriptions of services offered at supervised injection sites nurses' roles centre around wound care and vein maintenance, there is limited evidence of the processes and outcomes of nursing care within such settings.

Wood, Wood, et al. (2008) reported that almost half of the users of Insite received safer injection education delivered by nurses. These authors examined the characteristics of people receiving education from nurses and found that those most at risk, such as women and people who had trouble injecting, were most likely to receive safer injection education from Insite nurses. In Vancouver, the Dr. Peter Centre provides an integrated model of supervised injection that is part of nursing services (Wood, Zettel, et al., 2003). In a recent evaluation of the harm reduction room at the Dr. Peter Centre, implementation of harm reduction services was found to increase access to services through the building of more open and trusting relationships with staff (Krüsi, Small, Wood & Kerr, 2009), although for some clients, shame and fear of judgment limited their use of the supervised injection service.

The expert panel... concluded that Insite has had a positive impact on the health of the community, the health of the people who use it, residents, service providers and local business owners.

### *Safer crack use kits and supervised inhalation rooms*

Since the 1990s, there have been indications that the prevalence of crack smoking is increasing in both urban and rural settings (Fischer, Rehm, Patra, et al., 2006; Fischer et al., 2010). Safer crack

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kits provide the equipment and hardware for crack smoking, including glass pipes, tubing and lubricant, along with information about harm reduction. Sharing of crack pipes has been associated with increased risk of exposure to HCV and other communicable diseases (Macias et al., 2008; Tortu, McMahon, Pouget & Hamid, 2004; Tortu, Neagius, McMahon & Hagen, 2001). DeBeck et al. (2009) found that smoking crack was an independent risk factor for HIV seroconversion among injection drug users.

Malchy, Bungay and Johnson (2008) found considerable evidence of unsafe crack smoking practices in Vancouver and recommended the implementation of education and programming using safer crack kits to reduce the negative consequences of drug use as part of disease prevention and health promotion programming. Strike et al. (2006) recommended that safer crack use equipment be included in established needle distribution and recovery programs. In an evaluation of programs to distribute safer crack kits, Leonard, DeRubeis and Birkett (2006) found that such distribution was associated with a decrease in risk behaviours associated with transmission of HIV and HCV. They concluded that distributing safer crack-smoking materials to crack smokers contributes to smokers' transition to safer methods of drug consumption and significantly reduces disease-related risk practices. Larger-scale studies and systematic evaluations are needed to determine the effectiveness of safer crack kits in reducing disease transmission and modifying risk behaviours. Similar to needle distribution and recovery programs, safer crack kit programs could have the potential to facilitate access to other harm reduction, health and social services. More recently, the case is being made to expand supervised injection sites to include supervised consumption (Collins et al., 2005) to reduce some of the harms associated with crack smoking.

### *Housing First*

Housing programs often require abstinence from drug use as a condition of housing (Tsemberis, Gulcur & Nakae, 2004). Housing First programs place people who are homeless directly into housing and offer of housing is not contingent on the treatment for drug use (Padgett, 2007). Harm reduction is a key principle of a Housing First approach. Housing First is not contingent on either sobriety or obtaining treatment but is often combined with intensive health services provided by assertive community treatment teams. Evaluations of Housing First programs have found that participants have achieved increased housing tenure, with at least 70 per cent of participants remaining housed for four years or more. In addition, participants in Housing First programs have experienced no increase in substance use,

Harm reduction is a key principle of a Housing First approach. Housing First is not contingent on either sobriety or obtaining treatment but is often combined with intensive health services provided by assertive community treatment teams.

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psychiatric hospitalizations or acute care hospital use and they have perceptions of increased choice. (Gulcur, Stefancic, Shinn, Tsemberis & Fischer, 2003; Padgett, Gulcur & Tsemberis, 2006; Stefancic & Tsemberis, 2007; Tsemberis & Eisenberg, 2000; Tsemberis et al., 2004). An identified limitation of this research on Housing First programs is that the majority of study participants were recruited on the basis of a severe mental health diagnosis and appear to have had limited problematic substance use or addiction issues (Kertesz, Crouch, Milby, Cusimano & Schumacher, 2009).

In an analysis of the health, social and policing service costs of Housing First programs, Larimer et al. (2009) found that not only did participants decrease their alcohol use in comparison with a control group, the health and social costs were reduced for participants with previously high usage of health and social services. Using a before-and-after design, Podymow, Turnbull, Coyle, Yetisir and Wells (2006) found that after the implementation of a shelter-based-managed alcohol program, there were decreasing trends in the mean number of ambulance calls, emergency room visits, hospital admissions and police encounters, which resulted in decreased costs of service for the individuals enrolled in the program.

### *Criticisms of Harm Reduction*

Harm reduction as a response to illegal drug use has been the focus of considerable controversy and numerous criticisms of harm reduction have emerged (Christie, Groarke & Sweet, 2008; Hunt et al., 2003; Magura, 2007). It may be useful to highlight some of these criticisms and outline responses based on definitions and evidence of harm reduction previously reviewed in this paper. Frequently heard criticisms, several of which have been identified by Hunt et al. (2003), include, but are not limited to, the following points:

- Harm reduction keeps “addicts” stuck.
- Harm reduction fails to get people off drugs.
- Harm reduction encourages drug use.
- Harm reduction sends the wrong message.
- Harm reduction does not encourage personal responsibility.
- The evidence for harm reduction is inadequate.

The first three criticisms highlight the current tension between abstinence-based approaches to drug treatment in which the goal is to prevent or discontinue drug use, and harm reduction, which has goals to reduce the harms associated with drug use. Evidence from Switzerland, where a large-scale open drug scene thrived in a number of cities in the 1980s, showed that drug treatment programs that

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required abstinence for entry (i.e., high- and medium-threshold treatment programs) reached only 20 per cent of people actively using illegal drugs. Harm reduction programming is designed to reach the other 80 per cent – many of whom may not be dependent or addicted – through needle distribution and recovery programs, street outreach, supervised consumption sites, programming in prisons, and low-threshold methadone and heroin maintenance programs (MacPherson, 1999). Treatment for substance dependence is often assumed to be highly effective, but this assumption has not been borne out by scientific evidence. In such a context, harm reduction is seen as enabling drug use. However, treatment programs might have a success rate of only three per cent when abstinence is used as the benchmark of success after repeated cycles of treatment and relapse. Further, many people in Canada’s inner cities need access to replacement or substitution therapy, or both, in the context of the end stages of a chronic, relapsing illness (S. Burgess, personal communication, June 26, 2007).

Harm reduction strategies can be viewed as part of a continuum of prevention and treatment strategies. Harm reduction has been criticized for not reducing drug use – but a reduction in drug use and treatment of addiction are not among the stated goals of harm reduction; therefore, if someone fails to strive for or achieve abstinence, it does not necessarily mean that the harm reduction approach has failed. Because the goals of harm reduction are to reduce the harms of drug use and manage addiction, these are the goals by which it ought to be judged a success or failure. In fact, there is evidence that outreach programs and the referral process associated with supervised injection sites do not increase drug use (e.g., Wood, Tyndall, Montaner & Kerr, 2006).

The fourth criticism is that harm reduction sends the wrong message to youth about drug use. However, there is no evidence that harm reduction services encourage drug use among youth. Supervised injection sites such as Insite have been shown to attract long-term drug users (Kerr, Tyndall, et al., 2007), and many harm reduction programs have specific policies that restrict access based on age. The prevention of the harms of drug use can range from preventing initiation of drug use to reducing the harms of all use or non-problematic use only. Thus, prevention can encompass a range of meanings (Tupper, 2008a, 2008b). Not sharing information that would promote health out of fear that such information will exacerbate use may cause nurses to feel conflicted in their ability to ensure the health and safety of youth.

The fifth criticism states that harm reduction does not encourage personal responsibility for drug use. In a society where individual liberty and personal responsibility are highly valued, failure to discontinue drug use is viewed as a personal failure. This view does not account for social and other

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structural factors such as poverty, violence and abuse that shape drug use. Harm reduction principles emphasize the importance of informed decision-making, which is consistent with the CNA code of ethics (CNA, 2008). Further, governments may be viewed as being held responsible for promoting safer drug use through regulation of the production and distribution of psychoactive drugs – similar to the regulation of other potentially harmful or risky items such as children’s toys, automobiles, food, prescribed pharmaceuticals and beverages such as alcohol.

Harm reduction efforts have also been criticized as creating a new social order and form of surveillance, as in the case of supervised injection sites (Fischer, Turnbull, Poland & Haydon, 2004). Nurses recognize that personal responsibility is contextualized by life situations.

According to the CNA code of ethics (2008), in Part II, RNs should be committed to eliminating social inequities. The code of ethics recognizes the importance of advocacy to change the social conditions that affect health, such as poverty, violence and food insecurity, and to change policies that exacerbate inequities, such as drug policies that criminalize drug use.

Finally, some authors have outlined other criticisms of harm reduction in relation to evidence of its effectiveness, effects and intentions (Christie et al., 2008; Hunt et al., 2003). Harm reduction has been described as ineffective and the evidence to support it has been deemed inadequate. However, as shown by the present literature review, there is substantial evidence that needle distribution and recovery programs, methadone maintenance programs, heroin prescription programs, supervised consumption sites and outreach services have achieved a range of positive health and social outcomes, including increased referrals and access to services, reduced transmission of blood-borne diseases, reduced number of overdose deaths and reduced public disorder and crime. As stated earlier, many organizations, such as the World Health Organization, UNODC and UNAIDS, have endorsed harm reduction strategies as a public health measure on the basis of a well-established body of evidence (Wodak, 2009).

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## V. Legal and Ethical Perspectives in Nursing and Harm Reduction

Harm reduction strategies that reduce the harms associated with illegal drug use raise difficult legal and ethical questions for RNs in relation to federal, provincial and organizational drug policies. This section covers legal issues and ethical perspectives in nursing and harm reduction.

### *Legal Issues*

#### *Distribution of harm reduction supplies*

Needle distribution and recovery and safer crack use programs often prompt questions about the legalities of distributing harm reduction supplies and possessing used supplies. The legal opinion of the Canadian HIV/AIDS Legal Network is that distribution of new or unused safer crack use kits and syringes is not a crime (Canadian HIV/AIDS Legal Network, 2008). The primary reasoning is that under the *Criminal Code of Canada*, an instrument designed primarily to consume a drug is illegal, but safer crack kits and syringes are considered devices intended to prevent disease transmission through reduced sharing of equipment and thus would be covered under the *Food and Drugs Act*. The Canadian HIV/AIDS Legal Network states that “It is important to note that no court in Canada has ruled on this interpretation of the law, neither for NSPs [needle syringe programs], nor for programs that distribute safer crack use kits” (2008, p. 3).

Possession of a controlled substance is prohibited under the CDSA. According to the Canadian HIV/AIDS Legal Network, there has been at least one case in Canada in which possession of a used crack pipe was “considered as providing reasonable grounds for arrest” (2008, p. 4). However, the network also argues that arresting someone for possession of a crack pipe is contrary to the purpose of distributing safer crack kits. If people carrying a used crack pipe run the risk of being arrested for possession, they will be discouraged from having and using their own crack pipes and thus will be more likely to share and publicly discard their crack pipes. “The Legal Network considers that the federal government should make it clear that it is not illegal to possess used crack pipes (or needles used for injecting drugs), for at least two reasons” (Canadian HIV/AIDS Legal Network, 2008, p. 4). First, if crack supplies or needles are distributed by public health services, the purpose is to reduce harms, including preventing disease and ensuring safer use. Second, it is possible under the CDSA for a ministerial exemption from criminal prosecution of people in possession of used harm reduction supplies. Insite is able to operate because it has been granted this type of exemption.

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## *Supervised injection services*

Three approaches have been identified to facilitate operation of supervised injection services: administrative agreements, regulatory or ministerial exemptions and amendments to drug laws (Elliott, Malkin & Gold, 2002). Insite, North America's most well-known supervised injection service, was able to begin operation in March 2003 because the federal minister of health, under section 56 of the CDSA, exempted the users and staff of the facility from the provisions of the act. Exemptions may be granted for medical, scientific or any other purposes deemed to be in the public interest (Supreme Court of British Columbia [BC], 2008). The initial exemption for Insite was granted for scientific purposes for a three-year term commencing Sept. 12, 2003. The exemption was subsequently extended to Dec. 31, 2007, and then to June 30, 2008.

If Insite's ability to operate had depended on the exemption and no further extensions were forthcoming, Insite would have been required to close its doors on June 30, 2008. However, before the most recent extension expired, the Portland Hotel Society, which operates Insite in partnership with the Vancouver Coastal Health Authority, along with a number of other plaintiffs, sought relief from the ongoing series of extensions. They launched a court case in the Supreme Court of British Columbia, taking the position that Insite was a health-care facility and therefore under provincial jurisdiction. The Vancouver Area Network of Drug Users also filed suit, arguing that closing Insite would deprive injection drug users of access to health care and violate their section 7 right to security of person under the *Canadian Charter of Rights and Freedoms* (Supreme Court of BC, 2008). In court, witnesses testifying in support of the Portland Hotel Society's case made the following arguments (Supreme Court of BC, 2008):

- A review of evidence clearly indicates that Vancouver's Downtown Eastside has faced a public health crisis for several years, with increasing rates of infection of HIV and HCV and an explosion of overdose deaths documented in the 1990s.
- Addiction is an illness that is chronic in nature and can be progressive, relapsing and fatal.
- Addiction has neurochemical, genetic, psychological and social determinants (e.g., stress, trauma, abuse).
- Unsafe injection practices increase the rate of transmission of HIV and HCV.
- Supervised injections reduce morbidity and mortality.
- The introduction of the four-pillars approach (MacPherson, 2001) and the Vancouver Coastal Health Authority's introduction of a continuum of services, of which Insite is one example, are intended to reduce overdose deaths, increase safer injection and provide points of entry to health and social services.



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In his ruling of the case, Justice Ian Pitfield determined the following: “While users do not use Insite to directly treat their addiction, they receive services and assistance at Insite which reduce the risk of overdose that is a feature of their illness, they avoid the risk of being infected or of infecting others by injection, and they gain access to counselling and consultation that may lead to abstinence and rehabilitation. All of this is health care” (Supreme Court of BC, 2008, p. 51).

Justice Pitfield ruled that to close Insite would violate human rights.

Justice Pitfield ruled that to close Insite would violate human rights, specifically section 7 (risk to life) of the charter on the following grounds: regardless of the circumstances of entry into drug use, the result is an illness of addiction, and failure to manage addiction may lead to death from overdose or other illnesses. He stated, “If the root cause of death derives from the illness of addiction, then a law that prevents access to health care services that can prevent death clearly engages the right to life” (Supreme Court of BC, 2008, p. 53).

With regard to risks to security, Justice Pitfield determined the following: “Society cannot condone addiction, but in the face of its presence it cannot fail to manage it, hopefully with ultimate success reflected in the cure of the addicted individual and abstinence” (Supreme Court of BC, 2008, p. 54). He did not agree with denying people with an addiction access to health-care services that would reduce the effects of their condition: “Simply stated, I cannot agree with Canada’s submission that an addict must feed his addiction in an unsafe environment when a safe environment that may lead to rehabilitation is the alternative” (Supreme Court of BC, 2008, p. 55).

Justice Pitfield further determined that a failure to protect Insite’s staff from prosecution for possession and trafficking would be a violation of the charter because it would restrict access to health care. As a result of this case, Insite was granted a constitutional exemption to sections 4(1) and 5(1) of the CDSA, and the federal government had until June 2009 to revise sections of the act. Justice Pitfield did not agree that it was a matter of provincial jurisdiction.

The federal government filed an appeal in the British Columbia Court of Appeal. In January 2010, the Court of Appeal upheld the lower court ruling. Two of the three judges ruled that Insite was a health service and a provincial jurisdiction, but refrained from ruling on the charter issue. The third judge disagreed that it was a provincial jurisdiction. However, she agreed it was a charter issue. The federal government appealed to the Supreme Court of Canada, which agreed to hear the case.

Although not as well known as Insite, the Dr. Peter Centre in Vancouver – operated by a not-for-profit society, the Dr. Peter AIDS Foundation – has provided supervised injection services as part of its integrated health-care model since 2002 (Wood, Zettel, et al., 2003). Supervised injection service is a part of registered nursing and registered psychiatric nursing practice in both the day health program

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and the 24-hour skilled nursing care residence. Many of the Dr. Peter Centre clients live with multiple illnesses, disabilities and social inequities in addition to HIV/AIDS.

The Centre's RNs became increasingly concerned about overdose events on site, and recurrent but preventable soft-tissue infections associated with non-medical injection drug use. The Centre's executive director and RNs approached the Registered Nurses Association of British Columbia (RNABC, the predecessor of CRNBC) with the following question: "Is providing clients with evidence-based information to safely give themselves intravenous injections within the scope of registered nursing practice?"

In 2002, RNABC answered yes.

Assessing clients' knowledge and skill to safely give themselves intravenous injections is within the scope of nursing practice. Teaching and promoting evidence-based self-care activities prevents illness and promotes health, especially in relation to high risk client behaviours. Providing this information to these clients fosters the therapeutic alliance between the registered nurses and the clients and can facilitate promoting healthier client activities...Employers have an obligation to provide essential support systems so that registered nurses are able to meet the Standards for Nursing Practice in British Columbia. The essential support systems include the necessary policies and resources to assist nurses to provide competent, evidence-based and ethical care (M. Aldersberg, RNABC, personal communication to M. Davis, Dr. Peter Centre, February 19, 2002).

In 2005, RNABC became CRNBC under the new *Health Professions Act of British Columbia*. Two years later, CRNBC re-confirmed that supervised injection was part of RN practice for the purposes of preventing illness and promoting health. It also reiterated the employer obligation to support nursing practice (M. Aldersberg, CRNBC, personal communication to M. Davis, Dr. Peter Centre, December 11, 2007).

Unlike Insite, the Dr. Peter Centre does not have a section 56 exemption to the CDSA. It states it is upholding provincial law and is doing everything reasonably possible to uphold federal law: nurses do not touch, inject or supply the drugs.

The Dr. Peter AIDS Foundation was granted intervener status in Insite's BC Court of Appeal case. In her written summary of judgment, Justice Carol Huddart stated: "The evidence [provided by the Foundation] establishes how and why the decision in this case will have significant effect on registered nurses seeking to comply with the professional and ethical standards to which they are held by their governing body. That concern is at the root of the division of powers issue and the evidence will be helpful to a full understanding of that issue" (Court of Appeal for British Columbia, 2010, para. 188).

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The Pitfield decision (Supreme Court of BC, 2008), the BC Court of Appeal decision (Court of Appeal for British Columbia, 2010) and the experience of the Dr. Peter Centre provide important legal perspectives on supervised injection service. The implications for nurses are:

- Addiction is understood to be a chronic disease.
- Harm reduction services are core health-care services for managing addiction.
- It is unconstitutional to deny access to health-care services because of illegal drug use.
- Supervised injection education is within the scope of nursing practice.
- Managers and employers should support practice on the basis of current research.
- Managers and employers should support the development of organizational policies consistent with a harm reduction approach.

### *Ethical issues*

In relation to the response to illegal drug use, there are at least two conflicts that have particular relevance for RNs in Canada. The first conflict is between evidence and policy; the second is between harm reduction and health equity, fairness and social justice.

RNs have an ethical responsibility to promote health and well-being and a responsibility to base their practice on current evidence, but they may work in organizations that do not support harm reduction or that may endorse or exclusively follow an abstinence-based model. In essence, the illegal status of many drugs, along with current prohibitionist drug policies, create a concern about the very nature of ethical practice in the care of people who use illegal drugs. To examine ethical nursing practice in this context, a discussion of the professional values that underpin nursing practice is helpful.

The values of harm reduction are consistent with the values of professional nursing presented in the code of ethics: the provision of safe, ethical, competent and compassionate care; the promotion of health and well-being; the promotion of and respect for informed decision-making; the preservation of dignity, in which care is provided on the basis of need; and the promotion of justice.

The ethical commitments of RNs are outlined in CNA's code of ethics (CNA, 2008), which highlights important values that guide nursing practice and the delivery of care to all Canadians. The values of harm reduction are consistent with the values of professional nursing presented in the code of ethics: the provision of safe, ethical, competent and compassionate care; the promotion of health and well-being; the promotion of and respect for informed decision-making; the preservation of dignity, in

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which care is provided on the basis of need; and the promotion of justice (Lightfoot et al., 2009; Pauly, Goldstone, et al., 2007). In particular, in the provision of safe, competent and ethical care, RNs have a duty to base their practice on the best evidence available. The evidence reviewed earlier suggests that harm reduction strategies, including needle distribution and recovery services, supervised injection sites, peer outreach, methadone maintenance, distribution of safer crack kits and heroin prescription, are associated with reducing risk behaviours and promoting the health and well-being of people who use illegal drugs.

RNs have a duty to base their practice on the best evidence available.

In some situations, the lack of a harm reduction policy in a health-care organization may contribute to existing societal stigma in a culture permeated by negative attitudes toward illegal drug use. Nurses may be concerned about legal and organizational censure if they take a harm reduction approach in their practice. Although legal prosecution appears to be unlikely (Pauly, Goldstone, et al., 2007), there is the possibility that a nurse working in an organization that follows an abstinence-based model may face organizational censure if he or she departs from the organization's norms of practice.

National and provincial professional nursing associations have a key role to play in this regard. In Canada, the Saskatchewan Registered Nurses' Association has developed a position statement on harm reduction as part of the response to addressing health inequities (Saskatchewan Registered Nurses' Association [SRNA], 2008). The creation of a national position on harm reduction is particularly important. At the provincial level, existing nursing policy (e.g., the definition of nursing practice, professional standards and the CNA code of ethics) may be applied and interpreted to highlight important directions for the nursing care of people who use substances.

Fry, Cvetkovski and Cameron (2006) observed that questions of "microethics," or everyday ethics, abound in the operation and evaluation of supervised injection sites and supervised consumption sites. They state, "Applied ethical issues (e.g., maintenance of client privacy and confidentiality, consent in the case of intoxicated clients, staff role boundaries and duty of care in the case of self-harm through injection) may be considered by some as second-order compared to other clinical and empirical concerns" (p. 465). They argue that it is through reflection on these issues that values can be made explicit and practice enhanced. For example, concerns have been raised about the increased risk of HIV infection for people who require assistance with injecting (Wood, Spittal, et al., 2003). Individuals who are unable to inject themselves because of decreased mobility or lost limbs present ethically challenging cases for nurses who are at the front line of providing service in such situations. Within supervised injection sites and supervised consumption sites there is limited understanding of these issues as well as issues related to addressing the poor health and inequities in access to health care experienced by the individuals who use such facilities. Of key concern to the nurses at these facilities are the many ethical issues related to the implementation of harm reduction interventions (Pauly, Goldstone, et al., 2007).

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The second conflict for nurses is the degree to which harm reduction is aligned with fundamental commitments to equity and social justice as outlined in the CNA code of ethics (CNA, 2008). Harm reduction has been identified as “value-neutral” on the question of illegal drug use (Keane, 2003), but it is not value-free. Some have argued for a more morally invested understanding of harm reduction that acknowledges its underlying values and fosters ethical engagement as a means of enhancing research, treatment and policy (Fry, Treloar & Maher, 2005). There are differing views on the extent to which the harm reduction approach should include strategies to change the policy and political context that shapes the harms of drug use (Fry et al., 2005; Hunt, 2004). Historically, depoliticization of drug use was promoted as a means of reducing judgments associated with drug use; others have pointed out the limitations of depoliticizing harm reduction and the failure to address the social context in which the harms of illegal substance use are magnified (Fischer, Rehm, Kim & Kirst, 2005; Hathaway, 2001, 2002; Miller, 2001). Some have criticized harm reduction for not being more oriented to addressing social harms and the root causes of drug-related harms, such as homelessness and poverty (Miller, 2001). Increasingly, the harm reduction movement has highlighted the relationship between current international drug control regimes and human rights violations (Barrett, Lines, Schleifer, Elliot & Bewley-Taylor, 2008). International Harm Reduction Association (2010) principles have clearly embraced the need to challenge policies and practices that contribute to criminalization, discrimination and social inequities as germane to harm reduction. This positioning is particularly relevant to the practice of nursing and the goals of social justice. For example, education on safer drug use will never end the homelessness that contributes to the harms of drug use (Hardill, 2007). Harm reduction can be seen as a way to partially address inequities in health and health care for people who are experiencing marginalization as a result of drug use (Pauly, 2008a).

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## VI. Conclusions

- Nurses play an important role in mitigating the health-related harms associated with illegal drug use. Nurses can also act as a primary point of access to health care for people who use illegal drugs, and can link individuals to housing and social services to decrease some of the other harms of drug use. The organizational factors that shape access to health care, housing and social services need to be improved. For example, the potential for services that are not culturally or gender sensitive to further traumatize people who use illegal drugs is of serious concern. There is an urgent need to critically analyze access to health and social services and to develop and refine their structures, particularly harm reduction, counselling and trauma-care services.
- Including “social harms” in the definition of the harms of drug use holds significant implications for the way harm is perceived and for nursing practices and policies associated with drug use. As Rhodes (2002) highlights, it is important to consider social harms because housing, economic and employment policies contribute to the risk of poor health for people affected by substance use. Nursing goals and commitments are consistent with a comprehensive definition of harm reduction, which recognizes the intersections of social determinants of health with illegal drug use and is based on an understanding of the underlying social conditions that shape inequities. Nurses are well placed to extend understanding of the root causes of the harms of illegal drug use as a means to address health inequities, and such efforts are consistent with the nursing mandate as set out in CNA’s code of ethics (2008).
- Legal perspectives on the supply of harm reduction equipment and supervised injection are consistent with pre-existing standards of professional and ethical practice in nursing. The legal opinion of the Canadian HIV/AIDS Legal Network is that distribution of safer crack kits and syringes is unlikely to result in prosecution. The Pitfield decision and the experience at the Dr. Peter Centre support the provision of supervised injection as part of nursing practice in primary health-care services. However, there is limited development and often a gap or absence of official nursing policies in relation to these issues in the majority of health-care settings. To date, there has been limited examination of micro-ethical issues in harm reduction and nursing practice; more consideration of the ethical concerns associated with caring for people who use illegal drugs is needed.
- There is substantial evidence of the benefits of several targeted harm reduction strategies. Needle distribution and recovery programs have been shown to be safe, effective and cost-saving in reducing HIV risk behaviours and increasing access to health and social services for people who use injection drugs. Outreach strategies are a low-cost and effective means of reaching people who use illegal drugs and are particularly effective if they incorporate

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peer-based outreach. Supervised injection sites reduce HIV risk behaviours and overdose deaths, increase access to drug treatment and reduce public disorder. Methadone maintenance and heroin prescription are safe and cost-effective, with initial evidence indicating that heroin prescription is more effective than methadone maintenance for people who have failed previous treatment approaches. Initial studies of heroin prescription have found that it improves health outcomes and reduces illegal drug use and crime without any negative impacts on the community.

- Although there is considerable evidence concerning various harm reduction strategies such as needle distribution and recovery programs, methadone maintenance, heroin prescription, supervised injection sites, distribution of safer crack use kits and peer outreach, assessments of the role and impact of nursing in these strategies have been limited. Most of the nursing literature on harm reduction consists of descriptive accounts of nursing practice. Although these accounts provide important insight into the role of nurses in reducing the harms associated with the use of illegal drugs, research conducted by or with nurses to monitor and evaluate nursing processes and outcomes is also needed.
- While international and provincial drug policies have shifted to support harm reduction strategies consistent with a public health approach to illegal drug use, federal policies have increasingly embraced abstinence and a “war on drugs” approach. There is a patchwork of policies at the organizational level that may support or discourage efforts to reduce the harms of illegal drug use. In the absence of nursing policy on harm reduction, nurses are often caught between evidence and policy. Research on the development of risk environments as a framework (Rhodes, 2002; Rhodes et al., 2005) for understanding social factors that produce harms that influence illegal drug use points to the need for nurses to focus their attention not simply on drug policies, but also on policies such as social housing and income that contribute to the harms of drug use. In addition, histories of gender inequality, colonization and ethnic disparities strongly point to the need to understand the development of current policies through a gendered and culturally appropriate lens that pays attention to the conditions that create inequities associated with illegal drug use. Challenging policies and practices that contribute to harms is consistent not only with the principles of harm reduction but with the CNA code of ethics (2008) in which commitments to equity and social justice include addressing unfair or injustice policies.



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