INJECTION DRUG USE AMONG YOUTH: AN EXPLORATION OF KEY FACTORS INFLUENCING SAFER AND/OR UNSAFE PRACTICES

by

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Abstract

Background: Much of the research on injection drug use practices has focused on adult populations and relatively little is known about safer and/or unsafe injection practices among youth who use injection drugs (YWID). Unsafe practices may be risk factors for blood borne illnesses, abscesses or other infections, and overdose. Multiple factors may create barriers to the access of clean supplies and the ability to practice safer injection. It is important to understand how YWID engage in safer and/or unsafe injection practices so that use of safer practices may be supported.

Purpose: The purpose of this study was to explore the understandings and practices of safer and/or unsafe injection drug use among YIWD, as well as key social factors influencing these understandings and practices.

Methods: Ten semi-structured qualitative interviews were conducted with YWID aged 18 to 29 in Halifax, Nova Scotia. Voluntary informed consent was obtained prior to conducting the interviews. All interviews were audio-taped and transcribed, then analyzed using a modified approach to grounded theory for key themes and subthemes.

Results: The experiences of the YWID can be categorized into two overarching themes. The first theme relates to the power of the drugs and the control (or, at times, lack of control) YWID have over safer practices. This theme explores how access to clean supplies and understandings of safer use can influence the control YWID have over safer practices. The second theme describes experiences YWID have with "getting clean," or gaining power over drugs, including experiences with methadone maintenance treatment.

Discussion: YWID can and do practice safer use, however multiple factors, such as the perception of cleanliness in injection practices and the availability of clean needles in the community, impact how YWID understand and practice safer injection drug use. Barriers that impede YWID's ability to practice safer use need to be addressed.

List of Abbreviations Used

AIDS – acquired immune deficiency syndrome

HBV – hepatitis B virus

HCV – hepatitis C virus

HIV – human immunodeficiency virus

MMT – methadone maintenance treatment

NEP – needle exchange program

PWID – people who use injection drugs

SIF – supervised injection facility

YWID – youth who use injection drugs

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Chapter One: Introduction

"Harm reduction is a model for policy and law, service delivery and behaviour change.

Where risk and harm cannot be completely eliminated (or such is not desired), it seeks to reduce risk and harm, in a dignified and non-judgmental manner."

(Edith Springer, as quoted by the Harm Reduction Coalition, 2005)

Nova Scotia has the highest prevalence of injection drug use in Atlantic Canada, with an estimated minimum of 1,064 people who use injection drugs (PWID), compared with an estimated minimum of 827 and 140 PWID in New Brunswick and Newfoundland and Labrador, respectively (Patten, 2006). These figures are based on the prevalence of Hepatitis C virus (HCV) in the province, and estimates are conservative; thus, the actual number of PWID in Nova Scotia specifically, and Atlantic Canada in general, may be much higher (Patten, 2006). Injection drug use can be considered a risky drug consumption practice, notably for its association with the transmission of blood borne illnesses. Injection drug use is a major risk factor for Human Immunodeficiency Virus (HIV) and HCV (Public Health Agency of Canada [PHAC], 2006a). The Nova Scotia Strategy on HIV/AIDS (Nova Scotia Advisory Commission on AIDS, 2003) identifies PWID as a population vulnerable to HIV/AIDS². Approximately 25 percent of new HIV cases in Nova Scotia in 2001 were attributed to injection drug use (Nova Scotia Advisory Commission on AIDS, 2003). Among the Canadian population of PWID, approximately 13 percent are HIV positive, and 66 percent are HCV positive (PHAC, 2006a). Rates of blood borne illness among PWID are much higher than among the general population –

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¹ Data are not available for Prince Edward Island

² No such strategy exists in relation to Hepatitis C in Nova Scotia.

the prevalence of HCV within the total Canadian population is about 0.7 percent (PHAC, 2009).

The association of injection drug use with blood borne illnesses, and in particular HIV/AIDS, has been a catalyst for interest in harm reduction over the past two and half decades (Beirness, Jesseman, Notarandrea & Perron, 2008; Riley et al., 1999). Harm reduction interventions, such as needle exchange programs, methadone maintenance treatment, and supervised injection facilities, aim to deal with the immediate public health threats associated with drug use (Beirness et al., 2008). Practices of harm reduction began as early as the 1920s with the provision of substitution drugs to "narcotic addicts" (Drucker, 2000). The advent of HIV/AIDS among PWID in the 1980s, and the needle exchange programs (NEPs) that developed as a result, led to the recent increased public awareness of harm reduction (Inciardi & Harrison, 2000).

Despite international interest in harm reduction, much of the research into harm reduction, HIV prevention, and injection drug use has focused on adult populations (Dolan & Niven, 2005; Kikpe, Unger, Palmer & Edgington, 1996). In comparison, less is known about injection drug use and needle sharing, as well as prevention of needle sharing, among youth (Kikpe et al., 1996, Kipke, Unger, Palmer & Edgington, 1997; Lloyd-Smith, Kerr, Zhang, Montaner & Wood, 2008a). Furthermore, most existing harm reduction services respond to the needs of adults, and little effort has been made to reach out to youth (Merkinaite, Grund & Frimpong, 2010). Programs that are accessible and responsive to youth may experience increased success (Kelly & Caputo, 2007), thus there is a need to develop a clearer picture of injection drug use among youth and the safer

and/or unsafe practices that accompany this use (Merkinaite et al., 2010), which was the purpose of this study.

Statement of Research Purpose

The key purpose of this study was to explore *youths' understandings and* practices of safer and/or unsafe injection drug use, and the key social factors influencing these understandings and practices. Particular focus was placed on youths' experiences accessing needles and other injection-related paraphernalia (e.g., cookers, cotton, water) and other harm reduction supports through services in the community (e.g., needle exchange programs, pharmacies) as well as through other venues (e.g., other youth).

By gaining an in-depth understanding of safer and/or unsafe injection practices of youth who use injection drugs (YWID), including their experiences accessing clean drug-injection related supplies and key social factors that influence their safer and/or unsafe injection practices, providers and policy-makers may become better informed on ways in which to engage and support youth. The results of this study may be used to inform policy and practice of different services in Halifax offering safer injecting and other harm reduction supports to youth.

Harm Reduction

Harm reduction refers to any program, policy, or practice that aims to minimize the adverse health, social, and economic consequences of substance use on individuals who use substances, their families, and their communities without requiring individuals to cease or reduce their drug use (Beirness et al., 2008; British Colombia Ministry of Health, 2005; Marlatt, 1996; Riley et al., 1999). The philosophy of harm reduction is

pragmatic in nature – priority is placed on realistic goals and programs that are effective at mitigating the risks of drug use over aspirational goals, such as the elimination of drug use (Beirness et al., 2008; McKeganey, 2011; Riley et al., 1999). Harm reduction philosophy also emphasizes that the rights and dignity of drug users, as those of all people, should be respected and protected (Beirness et al., 2008; McKeganey, 2011; Riley et al., 1999).

All drug policies and programs aim to reduce the harmful consequences of drug use, however, not all drug policies and programs are *harm reduction* policies or programs (Riley et al., 1999). The designation of 'harm reduction' is restricted to those programs, policies, and practices that place priority on reducing the potential negative consequences of drug use to people who use drugs and their communities (Riley et al., 1999).

The philosophy of harm reduction is aligned with a public health perspective whereby society undertakes activities to assure the health of its people (Turnock, 2004, as cited by Kindig, 2007), insofar as the minimization of risks and harms forms part of the continuum of strategies to promote health and to avoid disease (Riley et al., 1999).

Rhodes (2002) argues that since the 1980s advent of 'new' public health, the 'rhetoric of public health' has shifted from individualistic behaviour change to focus on social and environmental health. Harm reduction, according to Rhodes, is a social movement parallel to new public health as the principles – of collective action for creation of environmental conditions conducive to reducing health inequalities – are equivalent. However, in practice, the primary focus of harm reduction interventions has been on individual behaviour change with less emphasis on the context-dependent nature of risk (Rhodes, 1997, 2002, 2009).

Needle Exchange as Harm Reduction

The first official NEP opened in Amsterdam in 1984 (Inciardi & Harrison, 2000; Lane, Lurie, Bowser, Kahn & Chen, 2000; Marlatt, 1996). The Amsterdam NEP was developed by local people who use drugs who were part of the Junkie Union ("Junkibond"), with assistance from the local health authority, in response to concerns about the spread of Hepatitis B virus (HBV) among PWID (Inciardi & Harrison, 2000; Lane et al., 2000; Marlatt, 1996). As knowledge of HIV and AIDS spread in the mid-1980s and the risk of HIV to PWID grew, the number of needles exchanged at the Amsterdam NEP increased (Marlatt, 1996).

International interest in NEPs grew in response to epidemics of HIV among PWID associated with sharing injection equipment (Kerr et al., 2010). By the end of the 1980s, NEPs were operating in many countries throughout the world (Riley et al., 1999). In 1989, Canada's first official NEP was established in Vancouver. Two other provinces – Ontario and Quebec – opened NEPs shortly thereafter (Lane et al., 2000).

In order to practice safer, PWID need access to the clean supplies that facilitate this, as well as information and education to support the adoption of safer practices.

NEPs provide sterile needles to PWID and recover contaminated needles (Vlahov & Junge, 1998). Many Canadian programs operate through a model of 'distribution' of needles, with or without the return of used syringes, rather than direct 'exchange' of used syringes for new syringes (Strike, Leonard, Millson, Anstice, Berkely & Meed, 2006).

NEPs are referred to by various terms, including needle distribution programs, needle distribution and recovery programs, syringe exchange programs, or needle and syringe programs (Canadian Nurses Association, 2011; Strike et al., 2006); in this paper, all

forms of needle/syringe exchange/distribution programs will be termed needle exchange programs (NEPs).

The primary purpose of NEPs is to prevent the spread of blood-borne illnesses, like HIV and Hepatitis, among PWID, and to reduce infections and other harms that stem from re-using and sharing needles (Beirness et al., 2008; Riley et al., 1999).

Additionally, NEPs provide a point of contact with drug users, an often hard-to-reach population, to deliver health services, referrals to treatment and other supports, and provide information and education about safer injection practices (Riley et al., 1999; Ritter & Cameron, 2006; Vlahov & Junge, 1998).

Needle exchange programs are perhaps the most widely researched harm reduction program and HIV intervention (Ritter & Cameron, 2006; Vlahov et al., 2001). The Amsterdam NEP was first evaluated in 1988, and declines in needle sharing among program attendees were reported (Buning, 1991, as cited in Vlahov et al., 2001). Evidence has since accumulated to suggest that NEPs decrease both risk (e.g., rates of needle sharing) (Kerr et al., 2010; Riley et al., 1999) and harm (e.g., incidence of HIV) (Hurley, Joley & Kaldor, 1997; Riley et al., 1999).

A 2006 review of international literature on NEP outcomes by Wodak and Cooney concluded that "the evidence to support the effectiveness of [NEPs] in substantially reducing HIV must be regarded as overwhelming" (p. 802). Furthermore, this review concluded that there is no strong evidence of any major unintended consequences, such as an increase in the frequency of injecting, and NEPs have actually been shown to have additional positive benefits, such as increased recruitment into treatment and cost-effectiveness. A 1998 meta-analysis by Cross, Saunders, and Bartelli

found that NEPs were effective in reducing high-risk drug use practices, such as needle sharing and lending. A 2003 meta-analysis by Ksobiech similarly concluded that "needle sharing/borrowing/lending behaviours decrease among [PWID] participating in NEPs" (p. 264). Thus, there is clear evidence that NEPs are an effective harm reduction strategy.

It is important to note that while the evidence is overwhelming in support of the effectiveness of NEPs, harm reduction strategies need to be appropriate for the population being targeted (Marlatt, 1996). The inception of the first NEP was a grassroots effort by a group of local people who use drugs in response to an identified need to facilitate safer practices to stem the spread of HBV in the drug-using community. Shoveller, DeBeck & Montaner (2010) describe a situation in which the effectiveness of a NEP was increased by adjusting the program to better meet the needs of the local community of PWID: in the mid-1990s, though a NEP had been in operation for several years, Vancouver had a high incidence of HIV among PWID, and some PWID were having difficulty accessing clean needles. An evaluation found that the existing NEP had restrictions that were creating barriers to its use. The program was fundamentally reformed – it was changed from needle exchange to distribution and was opened for longer hours, and a 24-hour needle exchange 'vending machine' was installed. A subsequent evaluation of the NEP found a reduction in needle sharing – from 20 percent to 9 percent, as well as a reduction in the incidence of HIV (Kerr et al., 2010; Shoveller et al., 2010).

Rhodes (2002) reminds us that harm reduction interventions are "social interventions" (p. 87). Interventions can create an environment that enables harm

reduction, however they are subject to variations in population behaviour in different settings and contexts. The research of Shoveller and colleagues (2010) and Kerr and colleagues (2010) demonstrates that interventions can be improved by considering the specific needs of the target population. Wodak and Cooney (2006) note that YWID tend to be under-represented in NEP populations, and, as noted, there is little available information on injection drug use and needle sharing, as well as prevention of needle sharing, among youth (Kikpe et al., 1996, 1997; Lloyd-Smith et al., 2008a). Youth who use injection drugs may be one population for whom harm reduction interventions could be improved.

Statement of Research Approach

Ten semi-structured interviews were conducted with youth who use injection drugs, 18 to 29 years of age, in Halifax. Verbal consent was sought from all participants, and in an effort to protect confidentiality no names were collected. Data were analyzed using a modified approach to grounded theory methods, borrowing from Strauss & Corbin (1998), Charmaz (2006), and Corbin & Strauss (2008). During open coding, codes were attached to the text to describe the ideas represented in the data. As codes accumulated, they were grouped into higher-order themes, and then the data were revisited and re-coded in light of new themes. As analysis progressed to focused coding, relationships were created within and between significant themes to create a conceptual ordering of the data, which was the goal of analysis. Further details on the methods used throughout this study will be provided in Chapter Three.

Summary

Nova Scotia has an estimated minimum of 1,064 people who inject drugs (Patten, 2006). Injection drug use is a major risk factor for HIV and HCV (PHAC, 2006a), and the Nova Scotia Strategy on HIV/AIDS recognizes PWID as a population vulnerable to HIV/AIDS (Nova Scotia Advisory Commission on HIV/AIDS). The association of injection drug use with HIV/AIDS has sparked interest in harm reduction interventions in recent decades (Beirness et al., 2008; Riley et al., 1999).

Harm reduction refers to any program, policy, or practice aiming to minimize the adverse consequences of drug use to individuals and communities without requiring that individuals reduce their drug use (Beirness et al., 2008; British Columbia Ministry of Health, 2005; Riley et al., 1999;). The philosophy of harm reduction is aligned with a public health approach that focuses on social and environmental health; however, in practice harm reduction has tended to focus more on individual behaviour change (Rhodes, 2002).

Needle exchange programs, which distribute clean needles and other injecting paraphernalia (Strike et al., 2006; Vlahov & Junge, 1998), are effective at reducing needle sharing, borrowing, and lending (Cross et al., 1998; Kerr et al., 2010; Ksobiech, 2003) and at reducing HIV transmission (Hurley et al., 1997; Wodak & Cooney, 2006). However, despite the effectiveness of NEPs, harm reduction strategies are social interventions and effectiveness may vary depending on context (Rhodes, 2002), thus harm reduction strategies need to be suited to the target population (Marlatt, 1996).

Research on injection drug use and harm reduction has tended to focus on adult populations (Dolan & Niven, 2006; Kikpe et al., 1996). Limited knowledge is available

on the safer and/or unsafe injection drug use practices of YWID (Kikpe et al., 1996, 1997; Lloyd-Smith et al., 2008a). The purpose of this study was to explore youths' understandings and practices of safer and/or unsafe injection drug use, and the key social factors influencing these understandings and practices.

Chapter Two: Literature Review

As noted in Chapter One, Nova Scotia has the highest prevalence of injection drug use in Atlantic Canada (Patten, 2006). Injection drug use can be considered a risky drug consumption practice, and is a major risk factor for HIV and HCV (PHAC, 2006a). The following chapter will outline injection drug use among youth, including the prevalence of injection drug use among youth, the risk associated with youth injection drug use, and possible barriers youth may face to practicing safer injection drug use.

Drug Use among Youth

Among youth, a lack of stable housing and integration into the informal economy (e.g., non-legal sources of income, such as drug-dealing or panhandling) are among the factors associated with injection drug use (PHAC, 2007), and according to some researchers, recent homelessness may be the most important among the various factors likely to predict injection drug use in youth (Feng, DeBeck, Kerr, Mathias, Montaner & Wood, 2012; PHAC, 2006b). There is a high prevalence of drug use among street youth (Buccieri, 2010; Karabanow et al., 2007; Mallett, Rosenthal & Keys, 2005; PHAC, 2006b). Street youth can be defined as "youth who spend considerable amounts of time on the street, who live in marginal or precarious situations, and who participate extensively in street lifestyle practices" (Kelly & Caputo, 2007, p. 728). Though the focus of this study is not on street youth per se, a large emphasis will be placed on this population as much of the literature pertaining to injection drug use among youth is concentrated on street-involved youth.

There are an estimated 150,000 street youth in Canada (2001 data) (PHAC, 2006b). Locally, the Halifax Report Card on Homelessness 2012 indicates that 1,973

individuals stayed at a shelter in 2011, of whom 193 were between 16 and 19 years of age³ (Nova Scotia Housing and Homelessness Network, 2012a). These figures include only those individuals who stayed in shelters and do not capture those living in other marginal housing situations (e.g., couch surfing) or sleeping rough (i.e., outside or in abandoned buildings).

Drug Use among 'Mainstream' Youth

The 1998 Canadian Campus Survey reported lifetime illicit drug use among Canadian university students at 47.5 percent (Adlaf, Gilsman, Demers & Newton-Taylor, 2003). When broken down by drug type, 47 percent of students reported lifetime cannabis use, and lifetime use of other illicit drugs ranged from a high of 19.6 percent for hallucinogens to less than one percent for crack-cocaine (0.9 percent) and heroin (0.7 percent) (Adlaf et al., 2003). Adlaf and colleagues note that these rates are not considerably different from rates of drug use among non-university students of the same age, and rates of drug use remained relatively stable between 1988 and 1998.

More recent Atlantic Canadian data are available for drug use rates among grade 12 students. In 2012, past 12-month cannabis use among grade 12 students was reported at 54.7 percent (Asbridge & Langille, 2013), which is relatively stable to the 53.1 percent rate of use reported in 2007 (Poulin & Elliott, 2007). No reliable data were available for opioid⁴ use in 2007 (Poulin & Elliott, 2007), however the rate of past 12-month use of non-medical prescription pain pills in grade 12 students was 16.4 percent in 2012

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³ Age categories in this report included under 16, 16 to 19, and adult.

⁴ Opioids refer to all alkaloids derived from the opium poppy and their semi-synthetic derivatives (e.g. morphine, heroin, hydromorphone, codeine, oxycodone), as well as synthetic analogues (e.g. fentanyl, methadone) and endogenous compounds synthesized by the body (e.g. endorphins). The term opiates refers to a group of alkaloids derived from the opium poppy that does not include synthesized (synthetic) opioids (World Health Organization, 1994).

(Asbridge & Langille, 2013). Lifetime use of all illicit drugs other than cannabis among Canadian high school students has been reported elsewhere as less than 10 percent (Paglia-Boak & Adlaf, 2007).

Drug Use among Street Youth

While illicit drugs appear to be used by about half of Nova Scotia university and high school students, it is well recognized that drug use is entrenched in street youth culture (Buccieri, 2010; Karabanow et al., 2007; Mallett, Rosenthal & Keys, 2005; PHAC, 2006b). Lifetime drug use among Canadian street youth has been reported between 94 and 95 percent (1999-2003 data) (PHAC, 2006b). In a study of street youth in Halifax, nearly all of the youth interviewed noted that problems with drugs and alcohol are health concerns of being on the street, and many indicated that drug addiction was their number one health concern (Karabanow et al., 2007). In another study of street youth in Halifax, 66 percent reported they had used an opioid (e.g. Dilaudid, heroin, methadone, OxyContin) at least once (Loiselle, MacKenzie, Patterson, Tota & Koeller, 2006).

Estimates of the prevalence of injection drug use among Canadian street youth range from 20 to 41 percent: a cross-Canada study of street youth carried out by the Public Health Agency of Canada reported rates of injection drug use among street youth to be roughly 20 percent (PHAC, 2006b). A large study of street youth in Vancouver, British Columbia reported rates of injection drug use between 30 and 41 percent (Kerr et al., 2009; Lloyd-Smith et al., 2008a). A Toronto study focusing specifically on street youth who were heroin users found that over 75 percent reported injection drug use (Brands, Leslie, Catz-Biro & Li, 2005). Furthermore, while data on rates of injection

drug use in Atlantic Canada are not reported by age, interviews conducted with key informants as part of an environmental scan in Atlantic Canada suggest that injection drug use among youth in Atlantic Canada may be under-reported (Patten, 2006). In a community-based study of street youth in Halifax, 54 percent reported that they had injected at least one drug (Loiselle et al., 2006). In comparison, 0.5 percent of Nova Scotia high school students reported having injected drugs in the past 12 months (Asbridge & Langille, 2013).

Injection Drug Use and Risk

As noted above, injection drug use is associated with an elevated risk of blood borne illnesses (PHAC, 2006a). In addition to PWID, the Nova Scotia Strategy on HIV/AIDS identifies youth, 15 to 29 years of age, as a population vulnerable to HIV/AIDS (Nova Scotia Advisory Commission on AIDS, 2003). In 2001, 21 percent of new cases of HIV in youth 20 to 29 years of age were attributed to injection drug use, and 40 percent of HIV cases among youth 15 to 19 years of age were attributed to injection drug use (Nova Scotia Advisory Commission on AIDS, 2003). A study of YWID under 30 in Vancouver found that 16 percent were HIV infected and 57 percent were HCV infected (Miller, Kerr, Strathdee, Li & Wood, 2007). This study found that YWID were 16.4 times more likely to die compared to the general Canadian population of the same age. At age 15, a YWID could expect to live another 36.8 years, compared to 64.8 years expected by the average Canadian 15 year old (Miller et al., 2007). In this study, HIV was the only predictor of premature mortality.

Moreover, the prevalence of HCV and HIV are significantly higher among street youth than among non-street youth of a similar age (Boivin, Roy, Haley & Galbaud du

Fort, 2005). Among street youth who report a history of injection drug use, HCV rates are about four to five times higher compared to those who have no history of injection drug use (PHAC, 2007). Street youth do show awareness of the risks of HCV stemming from injection drug use and report that drug use is a challenge to feeling physically and emotionally healthy (Karabanow et al., 2007).

There are several risky injection practices associated with this elevated risk of blood borne illness among PWID, including needle sharing, using someone else's used needle (needle borrowing), and giving another person one's used needle to use (needle lending). Studies that have looked at risky injection practices among youth who use injection drugs report rates of needle sharing, borrowing, and/or lending from 29 to 54 percent (Bailey et al., 2007; Brands et al., 2005; Lloyd-Smith et al., 2008a; PHAC, 2006b, 2007). A multi-site Canadian study of PWID (18 and over) found that roughly 15 percent reported sharing needles in the past six months (PHAC, 2006a). As these data suggest that more YWID than PWID report sharing behaviour, needle sharing may be a much larger problem among YWID, potentially putting them at greater risk for contracting blood borne illnesses.

Among PWID, research has shown that there is good knowledge of the risks of sharing needles, however there may be less awareness and/or misunderstandings of the risk associated with sharing water or spoons (Jackson, Bailey, Fraser, Johnson, Currie & Babineau, 2002). Drug injecting paraphernalia is the equipment used in the preparation and administration of drugs for injection, other than needles and syringes, and commonly refers to drug cookers/spoons, filters/cotton, and water/rinse (Gillies, Palmateer, Hutchinson, Ahmed, Taylor & Goldberg, 2010). When looking specifically at drug

injecting paraphernalia, one study of YWID, 16 to 24 years of age, in Hollywood, California, found that 45 percent of YWID shared cotton, 42 percent shared water, and 41 percent shared cookers (Kipke et al., 1996). A multi-site American study of YWID, ages 15 to 30, found that among those who did not share needles, 54 percent reported sharing other drug injecting paraphernalia (Thiede et al., 2007). Among those who did report needle sharing, almost all (96 percent) reported sharing other paraphernalia as well (Thiede et al., 2007). Thiede and colleagues concluded that while about half of the sample did not share needles, the finding that most shared other injection-related paraphernalia was troubling. Among PWID who share needles, sharing of cookers and cotton accounts for roughly 13 percent of HCV infections; however among PWID who do not share needles, drug cooker and cotton sharing account for 74 percent of HCV infections (Hagan, Thiede, Weiss, Hopkins, Duchin & Alexander, 2001). Thus, even though YWID may not share needles, other unsafe injection practices may put them at risk of blood borne illness.

In addition to high rates of sharing needles and other injection-related paraphernalia, YWID also experience other injection-related risks, such as overdose. A Toronto study of youth who used heroin found that over half of the sample had overdosed on opioids, with an average of three overdoses each (Brands et al., 2005). A Baltimore study of both YWID and youth who used drugs (but did not inject), ages 15 to 30, found that 29 percent of YWID had experienced an overdose, and 57 percent of the full sample (both those who did and did not inject) had witnessed an overdose (Sherman, Cheng, & Kral, 2007). Furthermore, recent homelessness was associated with having experienced an overdose (Sherman et al., 2007). An American study of youth, ages 16 to 25, who

used non-medical prescription drugs (opioids and tranquillizers) reported that roughly 24 percent had ever overdosed (Silva, Schrager, Kecojevic, & Lankenau, 2013). Past 90-day injection drug use was associated with an increased risk of overdose (Silva et al., 2013). Taken together, this research suggests that youth who use drugs are at risk of overdose, and the drug use of youth who are homeless and injecting may be higher-risk than that of youth who are housed and/or not injecting.

There is also some indication that the level of physical dependency among YWID is quite high. Youth who attempt to quit report withdrawal symptoms (Brands et al., 2005; Kipke et al., 1996). Furthermore, reports among youth who have attempted to cease opioid use or injection drug use indicate that the majority relapse (82 percent of those attempting to quit heroin use, Brands et al., 2005; 62 percent of those attempting to quit injection drug use, Evans, Hahn, Lum, Stein & Page, 2009). In one study, cessation of injection drug use was found to be less likely among youth who reported daily injection, who borrowed used needles, who had shared a cooker, and who had injected someone else's rinse (Evans et al., 2009).

Facilitators and Barriers to Safer Injection Drug Use

The ability to access clean equipment is critical to PWID's practices of safer injection drug use. In a qualitative study of PWID in Nova Scotia, mainly recruited through needle exchange programs (NEPs), PWID indicated that they relied on the services of NEPs, including outreach services, to maintain a supply of clean injection equipment (Jackson, Parker, Dykeman, Gahagan & Karabanow, 2009). Another qualitative study investigating the meanings of NEPs to PWID who use them reported that PWID identify NEPs as a key resource for accessing clean injecting supplies

(MacNeil & Pauly, 2011). Research indicates that NEPs are an environment in which PWID feel they do not have to hide their practice (Jackson et al., 2009; MacNeil & Pauly, 2011). MacNeil & Pauly reported that the PWID in their study felt discriminated against and ignored by health care providers who knew of their injection drug use, but they did not feel discriminated against when accessing a NEP. NEPs were described as a "safe haven" from the stigma and marginalization associated with injection drug use (MacNeil & Pauly, 2011, p. 29). The study in Nova Scotia found that most PWID reported that they would purchase equipment from pharmacies only as a last resort (Jackson et al., 2009).

Among PWID who use NEPs, needle sharing, borrowing, and lending is decreased in comparison to PWID who do not use NEPs (Cross et al., 1998; Kerr et al., 2010; Ksobiech, 2003). Obtaining needles from a NEP or pharmacy has been associated with less sharing among YWID as well (Bailey, Huo, Garfein & Ouellet, 2003; Kikpe et al., 1997). In a study comparing YWID NEP users and non-users, 41 percent of youth who used a NEP reported sharing, while 58 percent of non-NEP users reported sharing (Kipke et al., 1997). Furthermore, YWID using the NEP were also significantly less likely to share cotton, cookers, or water (Kipke et al., 1997). A majority of youth believe that sharing puts them at risk (Bailey et al., 2007), however, as noted, many YWID do share needles (Bailey et al., 2007; Brands et al., 2005; Lloyd-Smith et al., 2008a; PHAC, 2006b, 2007). There are multiple factors which may influence YWID's ability to practice safer injecting.

Barriers to Safer Injection: Stigma

The stigma attached to injection drug use may present a barrier to safer injection practices. Stigma refers to an attribute that is deeply discrediting (Goffman, 1963, p. 3). Injection drug use, under Goffman's typology of stigma, refers to "blemishes of individual character perceived as weak will, domineering or unnatural passions, treacherous and rigid beliefs, and dishonesty" (p. 4). There is a strong negative connotation attached to injection drug use (Jackson et al., 2009; MacNeil & Pauly, 2011; Rhodes et al., 2007; Simmonds & Coomber, 2009). Some PWID feel a general sense of shame and embarrassment in accessing NEPs, which may stem from fears of how the public views persons entering a NEP (Simmonds & Coomber, 2009; Jackson et al., 2009). Among drug users and non-drug users alike, "injecting carries a certain stigma that often exceeds that associated with other routes of drug use" (Jackson et al., 2009, p. 198).

Goffman (1963) notes that a key element of stigma is that individuals who are stigmatized tend to hold the same beliefs about the stigmatizing condition as the general public. As Goffman describes, "the standards he [the stigmatized person] has incorporated from the wider society equip him to be intimately alive to what others see as his failing, inevitably causing him, if only for moments, to agree that he does indeed fall short of what he really ought to be" (p. 7). The individual seems to internalize the negative perceptions generally held of the stigmatized attribute, creating moments where that individual feels a sense of self-shame.

Negative perceptions of PWID are common among street youth. Street youth report that intravenous heroin⁵ use is "the worst kind of drug use out there" (Fast, Small, Krusi, Wood & Kerr, 2010b, p. 129). Even among youth who use injection drugs, they report having been initially wary of commencing injecting for fear of being labeled a 'junkie' (Small, Fast, Krusi, Wood & Kerr, 2009). In Vancouver's Downtown Eastside, notorious for its public drug scene, YWID hold negative views of the area and villainize older residents (Fast, Shoveller, Shannon & Kerr, 2010a). These youth avoid the Downtown Eastside both as a way of reducing harms and as a result of social norms that discourage youth involvement in the area. However, a consequence of this avoidance is that it also leads to avoidance of service organizations in the area (Fast et al., 2010a). Thus, it is possible that even in locations with a less public drug scene youth may avoid locations frequented by older drug users, such as a NEP, to avoid associating with older users or as a result of social norms that discourage a youth presence at these locations. YWID may also avoid formal services not only because of the stigma they attach to service users, but due to an internalized sense shame over their own injection drug use as well.

Both PWID and street youth report negative stigmatizing experiences dealing with formal services, and often formal health services (Jackson et al., 2009; Karabanow et al., 2007). One response among both groups is to avoid formal services (Jackson et al., 2009; Karabanow et al., 2007). Another strategy employed by PWID is to hide their drug use when accessing formal services (Jackson et al., 2009), a practice that may be more likely among YWID (Merkinaite et al., 2010). In addition to a tendency to hide injection

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⁵ In Atlantic Canada, Dilaudid (hydromorphone) and OxyContin (oxycodone) are the more commonly injected opioids (Patten, 2006).

practices, youth, due to their developmental age, may also feel invulnerable to harm, and ignore, not recognize, or be embarrassed to disclose symptoms of illness (Morse, Morse, Burchfield & Zeanah, 1998). The tendency to conceal injection practices may be particularly troubling in youth, as new initiates to injection drug use tend to know less about the transmission of blood borne illnesses and practice fewer risk reducing behaviours (Kipke et al., 1997). Thus, youth may be vulnerable to injection related harms (e.g., abscesses) and blood borne illnesses, and hiding their drug use practices may prevent them from receiving adequate support.

Stigma and street involvement. Stigma may be doubly felt among YWID who are also street youth. In addition to the stigma attached to injection drug use, street-involvement is in and of itself stigmatizing. Street youth describe feeling disempowered, highly marginalized, and disconnected from mainstream society (Karabanow et al., 2007). Karabanow and colleagues describe this experience as being 'othered', or overtly stigmatized by one's day to day existence (p. 25).

Among PWID, those who are homeless are sometimes perceived by other PWID as lesser because they are assumed to share and unsafely dispose of injection equipment, or in other words, be irresponsible injectors (Simmonds & Coomber, 2009). Rhodes and colleagues (2007) note that PWID report injecting in public spaces because of constraints, not choice. Injecting in a non-public space is seen as cleaner (Rhodes et al., 2007), and non-homeless PWID who are better able to practice safer, cleaner injection often pass judgment on homeless PWID (Simmonds & Coomber, 2009). Rhodes and colleagues note that the location of injecting, public versus private, indicates one's place in the world – public injectors are 'dirty' and 'worthless' and marginalized by other drug

users. Thus even within the population of PWID, a hierarchy is created where some injectors are seen as more responsible, or better, than others – and the stigma on 'irresponsible' homeless PWID is increased. Homelessness, or street involvement more generally, may create a situation of increased risk.

Barriers to Safer Injection: Risk Environment

There are several definitions of 'risk' in the literature on injection drug use.

Rhodes' (2002, 2009) risk environment framework focuses on the social and physical spaces in which a variety of factors may interact to increase or decrease drug-related harm. The risk environment approach shifts the onus of change from the individual to the social context in which individuals find themselves (Rhodes 2002, 2009). This approach seeks to understand the social, political, physical, and economic environmental determinants of risk in order to identify barriers to and opportunities for harm reduction (Rhodes 2002, 2009). For example, social environmental determinants of risk may include peer group risk norms, service access and delivery, and the stigmatization of drug users (Rhodes, 2009). Political risks may include availability of clean needles or of social housing. Physical risks may include drug using locations, and economic risks may include the cost of prevention materials, a lack of income generation and employment, and growth of informal economies (Rhodes, 2009).

The drug scene (i.e., local drug environment) may constitute a risk environment and contribute to an increase in the risk encountered by youth. There is a perception that the longer one is involved in the drug scene, the greater the level of risk one is willing to accept, such that movement towards problematic drug use may be inevitable (Fast et al., 2010a, 2010b). Street youth have noted a mismatch between wanting to stay away from

the drug scene, and daily realities that may push them towards it, such as needing money from the informal economy or needing harder drugs to deal with the harsh realities of being on the street (Fast et al., 2010a). This immersion into the drug scene, where drugs are both visible and available, combined with exclusion from mainstream society and traditional opportunity structures, creates a situation where drug use is seen as a more mundane, and eventually unavoidable, choice (Fast et al., 2010b). Belonging to the drug scene may push youth towards escalating drug use, while at the same time reinforce their exclusion from mainstream opportunities (Fast, Small, Wood & Kerr, 2009).

Street involvement may further constitute a risk environment for its association with unsafe injection practices. Drug users have noted that it is difficult to refrain from drug use in the shelter environment, as well as when sleeping in public spaces, as many people in these environments use drugs, and drugs and drug dealers are constantly present (Dickson-Gomez, Hilario, Convey, Corbett, Weeks & Martinez, 2009). A study examining the relationship between housing status and HIV transmission among PWID in Vancouver noted that PWID living in unstable housing were at significantly elevated risk of HIV transmission (Corneil et al., 2006). In this study, younger age was associated with unstable housing. Syringe sharing was also associated with unstable housing (Corneil et al., 2006).

Returning to the multi-site American study of YWID by Thiede and colleagues (2007), sharing of injection paraphernalia other than needles was more likely among participants who had recently experienced homelessness. Public injecting has also been associated with homelessness (Marshall, Kerr, Qi, Montaner & Wood, 2010). Public injecting can increase unsafe injection practices. Of those injecting in public, 62 percent

report having had to rush while injecting at least once in the past 6 months, and needle sharing and failure to clean the injection site have also been associated with public injecting (Marshall et al., 2010). Injecting in semi-public areas, shooting galleries, and friends' houses have all been associated with both sharing needles and not cleaning injecting equipment before use (Latkin, Mandell, Vlahov, Oziemkowska, Knowlton & Celentano, 1994). Furthermore, PWID with injection-related skin infections are more likely to live in unstable housing (Lloyd-Smith, Wood, Zhang, Tyndall, Montaner & Kerr, 2008b). Thus, it appears as though being unstably housed may increase the likelihood of unsafe injection practices among PWID.

Summary of the Literature

There are an estimated minimum of 1,064 PWID in Nova Scotia (Patten, 2006). PWID have higher rates of HIV and HCV than the general population (PHAC, 2006a, 2009).

Excluding cannabis, illicit drug use among Canadian grade 12 and university students is generally under 10 percent (Adlaf et al., 2003; Paglia-Boak & Adlaf, 2007; Poulin & Elliott, 2007). However, rates of drug use among street youth are much higher (PHAC, 2006b). Lifetime use of illicit drugs is around 94 to 95 percent (PHAC, 2006b), and 20 to 41 percent of street youth are estimated to use injection drugs (Lloyd-Smith et al., 2008a; Kerr et al., 2009; PHAC 2006b). Many street youth note that drug and alcohol addiction are primary health concerns of being on the street (Karabanow et al., 2007).

Studies looking at YWID report rates of needle sharing, borrowing, and/or lending between 29 and 54 percent (Bailey et al., 2007; Brands et al., 2005; Lloyd-Smith

et al., 2008a; PHAC 2006a, 2007). This is higher than the 15 percent sharing rate reported among adult populations of PWID (PHAC, 2006a). High rates of sharing injecting paraphernalia, such as cookers, cotton, and water, have also been reported (Kikpe et al., 1996; Thiede et al., 2007). This is troubling, as sharing of cookers and cotton has also been associated with HCV infections in PWID (Hagan et al., 2001).

Needle exchange programs have been identified by PWID as safe environments and key resources to facilitate safer injection (Jackson et al., 2009; MacNeil & Pauly, 2011). YWID who use NEPs report less needle, cooker, cotton, and water sharing than those youth who do not use NEPs (Bailey et al., 2003; Kikpe et al., 1997). However, there are multiple factors which may make safer injection practices difficult for youth.

Injection drug use is highly stigmatized, more so than other forms of drug use (Jackson et al., 2009; MacNeil & Pauly, 2011; Rhodes et al., 2007; Simmonds & Coomber, 2009). Youth report negative attitudes towards injection drug use and older PWID (Fast et al., 2010a, 2010b; Small et al., 2009). Many street youth may avoid areas in which drug use is highly present, even if this means avoiding services in that area (Fast et al., 2010a). YWID may also avoid harm reduction services due to the stigma they have internalized as a result of their injection drug use (Goffman, 1963). Both PWID and street youth report negative experiences in dealing with formal services, and may avoid such services as a result (Jackson et al., 2009; Karabanow et al., 2007). Additionally, there is increased stigma attached to being a homeless PWID (Simmonds & Coomber, 2009; Rhodes et al., 2007), so YWID who are also street youth may feel doubly stigmatized. The constraints youth may face in accessing services and supports are troubling as they may interfere with their ability to practice safer.

Notions of risk environments (Rhodes, 2002, 2009) help to explain the contexts and situations in which safer and/or unsafe injection practices are more likely to occur. The environment in which drugs are taken may increase the level of drug use and risk among youth (Fast et al., 2010a, 2010b). Daily struggles with street involvement may work to entrench youth in local drug scenes, which can escalate drug use, furthering exclusion from mainstream culture (Fast et al., 2009, 2010a, 2010b).

In addition to the potential to escalate drug use, street involvement has also been linked to heightened HIV risk and unsafe injection practices (Corneil et al., 2006). Unstable housing has been linked to syringe sharing (Corneil et al., 2006), paraphernalia sharing (Thiede et al., 2007), and public injecting (Marshall et al., 2010).

In summary, injection drug use among youth is very complex. Street youth, in particular, exhibit high rates of illicit drug use, including injection drug use. YWID exhibit high rates of unsafe practices, including needle and other injection-related paraphernalia sharing. While harm reduction services can help facilitate safer practices, there are a number of barriers to access, including the stigmatized nature of injection drug use. Furthermore, the environments in which YWID may find themselves may increase both their risk of drug use and the risk that they will use unsafely. The purpose of this research, as stated in Chapter One, will be to explore youths' understandings and practices of safer and/or unsafe injection drug use, and the key social factors influencing these understandings and practices.

Chapter Three: Research Design and Research Methods

"People have the right to let their voices be heard."

(Julia Corbin and Anslem Strauss, 2008, p. 29)

As outlined in Chapter One, the key purpose of this study was to explore youths' understandings and practices of safer and/or unsafe injection drug use, and the key social factors influencing these understandings and practices. Particular focus was placed on youths' experiences accessing needles, other injection-related paraphernalia, and other harm reduction supports through services in the community as well as through other venues.

This chapter outlines and explains the paradigmatic stance and methodological approach that guided the conduct of this study. The research process – including the population and data collection, management, and analysis techniques – are described, and relevant ethical considerations are discussed. Finally, data quality, study limitations, and dissemination strategies are outlined.

Paradigmatic Stance

A paradigm is a set of basic beliefs that guide a researcher's approach to the research question (Guba & Lincoln, 1994; Weaver & Olson, 2006). Paradigms are the values that orient the research process (Guba & Lincoln, 2005) and provide a lens through which an issue is interpreted (Weaver & Olson, 2006). This study was situated within the constructivist paradigm (also known as the interpretive paradigm). The aim of a research inquiry conducted within the constructivist paradigm is to understand the

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meanings that individuals attribute to their lives – to understand the world through the eyes of those who live in it (Guba & Lincoln, 1994; Weaver & Olson, 2006).

Unlike positivists, who believe that knowledge and truth are universal and can be objectively obtained (Weaver & Olson, 2006), constructivists believe that there exists multiple contextually-bound truths (Guba & Lincoln, 1994; Weaver & Olson, 2006). According to constructivists, truth is not universal, but rather tied to the unique conditions experienced by individuals and communities (Weaver & Olson, 2006; Guba & Lincoln, 2005). The nature of reality and what can be known is perceived subjectively, relative to the social context in which it occurs (Guba, 1990; Lincoln, 1990). It is the job of the researcher who works within this paradigm to remain open to multiple possible interpretations, or versions, of reality (Guba, 1990). A constructivist inquiry seeks to produce a detailed description and understanding of ordinary occurrences as experienced by those living them (Weaver & Olson, 2006). In the context of this study, participants' realities likely differed from my own, and different participants likely had different experiences from one another. It was thus important that I remained open and sought to explore, construct, and relate multiple experiences of truth.

Constructivists also believe that the findings of a study are co-created between the researchers and the participants, elicited through interactions between them (Guba & Lincoln, 1994; Lincoln, 1990). The researcher brings his or her values to the research in that these values influence the form that the research will take – the question(s) asked and the methods used to answer the question(s) (Lincoln, 1990). At the same time, the participant brings his or her own values to the research and what he or she has to share with the researcher is important (Lincoln, 1990). Within the constructivist paradigm,

interactions between the researcher and participants are inevitable and should be acknowledged (Lincoln, 1990).

Researcher Identity

I believe firmly in the philosophy of harm reduction as an approach to addressing substance use. I believe it is important to work with individuals to reduce the harms associated with substance use without requiring that they change or reduce their drug use in order to obtain care and support. I feel that all human beings have value, and that people who use drugs, as all people, are deserving of respect and dignity, which I believe is best afforded within a harm reduction framework.

I am a 25-year old Caucasian female from a middle-class background. I do not belong to a marginalized population and I have no personal or familial experience with drug use or injection drug use. It is possible that my position as an outsider to the injection drug using community impacted my data collection procedures. It is possible that my identity made participants uncomfortable relating to me and that they did not answer my questions openly. On the other hand, it is possible that my position as an outsider allowed participants to be more open as I was unfamiliar with their behaviour and the context in which they live, thus they may have been more willing to share their views and opinions with me. I sought to remain open and willing to listen to and hear the voices of participants (Bresler, 1995; Cheek, 1996, as cited in Strauss & Corbin, 1998) both during the interviews and during the analysis process.

My supervisory committee was comprised of experts in the fields of injection drug use, harm reduction, and street youth, and they have many combined years of experience conducting qualitative inquiries with populations similar to that of this study.

Drawing on the experience of my committee and my own commitment to the philosophy of harm reduction, I tried to approach my participants in a respectful manner so as to make them feel at ease and to elicit rich descriptions of their experiences.

Methodology

Qualitative research examines lived experiences (Strauss & Corbin, 1998).

Qualitative inquiry allows the researcher to delve into the intricate details of phenomena and is useful when the goal of inquiry is to understand complex problems, as it facilitates "getting into the field" to discover what people are doing and thinking (Strauss & Corbin, 1998, p. 11). As this research sought to understand the lived experiences of youth who use injection drugs, it was well-suited to qualitative inquiry.

Grounded Theory

Grounded theory was developed by Glaser and Strauss in the 1960s as a way of developing theory grounded in research data (Bryant & Charmaz, 2007; Charmaz, 2006; Glaser & Strauss, 1967). At the time that grounded theory was developed, the predominant research orientation was quantitative and positivistic, favouring verification of deductive theories (Charmaz, 2006; Glaser & Strauss, 1967). Grounded theory was put forth as an alternative to theory verification; as a means of creating theory inductively derived from data. Grounded theory offers more than a set of procedures with which to conduct analysis (Strauss & Corbin, 1998). Grounded theory offers a way of thinking about and viewing the world that can enrich the research (Strauss & Corbin, 1998).

One key concept tied to grounded theory is that the results developed from the data must be grounded in the data (Bryant & Charmaz, 2007; Glaser & Strauss, 1967). For Glaser and Strauss, the explanatory framework that is developed must 'fit' a

situation, which is to say that themes must be readily applicable to and indicated by the data. The explanatory framework must also 'work' when put to use – it must be meaningfully relevant and able to explain behaviour (Glaser & Strauss, 1967).

Another concept guiding grounded theory methodology is the idea that the world in which we live is complex (Corbin & Strauss, 2008). Any conceptualization of research data offers an *interpretive* portrayal of the world under study, not an exact representation of it (Charmaz, 2006). Knowledge is created and shaped through actions and interactions (Corbin & Strauss, 2008); grounded theory studies how participants explain these actions (Charmaz, 2006). As different people have different experiences, these explanations will vary, and many perspectives of what is true exist (Corbin & Strauss, 2008). The idea behind grounded theory is to learn what the lives of the research participants are like and then portray the words and actions of participants, with an understanding that this portrayal is only one of many possible explanations (Charmaz, 2006; Strauss & Corbin, 1998).

Corbin and Strauss (2008) define methodology as "a way of thinking about and studying social phenomena" (p. 1). Thus, using a modified approach to grounded theory methodology, the following guided my thinking about and studying of the understandings and practices of safer and/or unsafe injection drug use among YWID in Halifax:

Multiple perspectives exist, created through actions and interactions. These complexities are acknowledged and analyzed in order to create a conceptual rendering that is indicated by the data from which it is derived and works to suggest meaningful explanations of the behaviours of YWID in Halifax.

Population

The target population for this study was youth who used injection drugs and: 1) were between 16 and 29 years of age; 2) had actively engaged in injection drug use in the past 30 days; and 3) were available for a face-to-face interview in Halifax, Nova Scotia.

According to Health Canada (2009), youth between the ages of 16 and 18 with "sufficient understanding" are able to give full, independent consent to participate in research⁶ (p. 30). Furthermore, several organizations serving marginalized youth in Halifax use 16 as their lower age bound. Thus 16 years of age was selected as the lower age bound. Mainline Needle Exchange, which is a key community organization providing harm reduction services in Halifax, uses 29 as the upper bound of their lowest age category for demographic purposes. Several research studies and reports, including the Nova Scotia Strategy on HIV/AIDS, have included individuals up to 29 years of age when speaking about youth (Cronquist, Edwards, Galea, Latka & Vlahov, 2001; Evans et al., 2009; Miller et al., 2007; Nova Scotia Advisory Commission on AIDS, 2003; Roy, Nonn, Haley & Cox, 2007), and therefore 29 years of age was selected as the upper age bound for this study.

Injection drug use has been variously defined in the literature. Definitions include, but are not limited to, injection drug use in the past 30 days (Kipke et al., 1996, 1997; Miller et al., 2007), in the past 6 months (Cronquist et al., 2001; Fuller, Vlahov, Arria, Compad, Garfein & Strathdee, 2001), and in the past 12 months (Jackson et al., 2002). For the purposes of this study, "active" injection drug use was defined as use of injection drugs within the past 30 days.

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⁶ Except in Ouebec

Recruitment was restricted to those youth who injected illicit drugs (e.g., heroin, cocaine, methamphetamine) or licit drugs used in ways other than medically directed (e.g., Dilaudid, OxyContin). In the literature, people who inject hormones or steroids have different behaviours from those who inject illicit drugs or licit drugs used in ways other than medically directed (Simmonds & Coomber, 2009; Kipke et al., 1996). For example, steroid users do not experience withdrawal and thus do not feel that they are driven to sharing (Simmonds & Coomber, 2009), and youth who inject hormones often initiate in an effort to change their appearance and thus have different drug use histories than YWID (Kipke et al., 1996). Therefore, people who inject primarily hormones and/or steroids were not included in this study.

The study was conducted in Halifax, as there is a population of YWID in the city, and very little research has been conducted with this population. No residency criterion was set as this study focused on YWID irrespective of where they lived. Recruitment was not restricted to or specifically targeted at youth who were marginally housed.

Recruitment Procedures

Purposeful sampling procedures were used to obtain a sample of 10 individuals who fit the criteria outlined above. Purposeful sampling is a sampling technique used in qualitative research to select specific individuals who can share their experiences to contribute to an understanding of the question being researched (Creswell, 2007). Decisions are made about who should be sampled and how sampling will occur, and participants are selected because they can "purposefully inform" the research question (Creswell, 2007, p. 125).

Two community organizations serving people who use drugs and/or marginalized youth agreed to assist with recruitment by arranging interviews with clients who fit the selection criteria for this study. Interviews were conducted in a private room in the organization from which the participant was recruited. A poster campaign was also planned; however, as these two community agencies were very willing to assist with the recruitment of 10 individuals for this study, poster distribution was not required.

Additionally, snowball sampling was used. Snowball sampling seeks to identify potential participants of interest from people who may know them (Creswell, 2007), in this case other research participants. I asked participants to think about any eligible peers who may be interested in participating and provided business cards with the title of the study and my contact information. As community organizations were my primary point of access to this population, it was assumed that most participants recruited would be using harm reduction services. It was through snowball sampling that I had hoped to gain access to youth who may not have been using services and may not have had ready access to clean paraphernalia. However, snowball sampling efforts were ineffective – no participant was recruited this way.

Data Collection

I conducted 10 one-on-one, semi-structured qualitative interviews with youth who reported using injection drugs in the past 30 days. Semi-structured interviews were conducted with a basic interview guide that outlined the topics to be covered; however I had the flexibility to probe throughout the interview and to alter the sequence and wording of the questions to fit the situation (Patton, 2002). The interview guide helped me to make the best use of the interview time, focus on what the participant was saying,

and ensure that complete, comprehensive data were collected from each participant. The purpose of the interview was to elicit conversation – to explore rather than interrogate (Charmaz, 2006; Patton, 2002). Through the interview, I sought to gain insight into the unique experiences of each participant (see Appendix A for interview guide).

Participants were asked to speak about their experiences with safer and/or less safe injection practices. Participants were informed during the consent process and at the start of the interview that their participation was completely voluntary, that they could skip any question they did not want to answer, and that they were free to end the interview at any time (see: Ethical Considerations).

With participant consent, all interviews were audio-recorded. Audio-recording the interview allows the interviewer to focus on the participant rather than note-taking during the interview and allows for the collection of detailed data (Charmaz, 2006). I transcribed all audio-recordings and cleaned the data to remove personally identifying information. In order to protect participant confidentiality, audio-recordings were deleted after transcription and only cleaned copies of transcripts have been kept.

Interview guide pre-test. The interview guide was pre-tested with a youth between 16 and 29 years of age who had used injection drugs but was, at the time of the pre-test, *currently in recovery* (i.e., not actively injecting drugs). A youth in recovery was chosen as he or she would not qualify for the actual study interviews (i.e., had not injected in the past 30 days). This youth in recovery was accessed with the help of a community organization, and the pre-test was carried out in a private room at this community organization.

The content of the interview was sensitive in nature, and discussions of drug use could have acted as a trigger to a youth in recovery. All relevant ethical considerations that applied to study interviews with the target population (e.g., verbal informed consent, respect for confidentiality, ability to skip questions or leave early) (see: Ethical Considerations) also applied to the youth who helped to pre-test the interview guide (see Appendix B for Pre-Test Consent Form).

During the pre-test, no data were collected. Rather, the participant was asked to go through the interview guide and provide feedback on the content and wording of the questions to ensure that the guide was appropriate for the target population. Notes were taken during the pre-test as to areas of the interview guide that needed amendments, and these amendments were made in consultation with my supervisory committee and submitted to the Dalhousie Ethics Review Board prior to commencing interviews on the target population. The person who completed the pre-test of the interview guide was given a 15 dollar (CDN) honorarium in appreciation of his or her time.

Ethical Considerations

Due to the stigmatized and marginalized nature of the study population (Buccieri, 2010; Jackson et al., 2009; Karabanow et al., 2007), multiple ethical considerations were taken into account (see Appendix C for Ethics Approval).

Consent

Verbal consent was obtained from all participants. There is support in the literature that when studying street youth and/or people who use injection drugs, verbal consent is an acceptable form of consent (Ensign & Bell, 2004; Gleghorn, Marx, Vittinghoff & Katz, 1998; Jackson et al., 2009; MacNeil & Pauly, 2011). The Tri-

Council Policy Statement notes that other means of providing consent, such as oral consent, are "equally ethically acceptable" (Canadian Institutes of Health Research, Natural Sciences and Engineering Council of Canada, and Social Sciences and Humanities Research Council of Canada, 2010, p. 44). The Dalhousie Ethics Review Board suggests that signed consent forms, in certain instances, may constitute a risk to participants, in which case verbal consent may be appropriate (Dalhousie Research Ethics, 2007, p. 9). As there are potential legal implications involved in discussing injection drug use, attaching names to the data could have put participants at undue risk, and thus verbal consent was sought. The information provided in the consent form was consistent with that of a signed consent form (i.e., the same format was followed), and participants received a copy of the form, as suggested by the Tri-Council Policy Statement. Prior to commencing the interviews, I read the consent form with the participant, however participants were not asked to sign anything. Instead, I signed the consent form to indicate that the participant had provided verbal consent to participate (see Appendix D for Consent Form).

Participants also gave verbal consent to allow me to audio-record the interview.

Participants were informed that the interview did not have to be audio-recorded and that should they decline I would take hand-written notes during the interview instead.

Participants were also informed that the audio-recordings would be deleted after I had transcribed and checked them, and only cleaned copies of the transcripts would be kept.

No participant declined to be audio-recorded.

Participants were informed that they were not required to respond to any question that they did not want to answer, and that they could skip any question at any time. If a

participant seemed hesitant to answer, I asked him or her if he or she would like to move onto the next question, however, no one declined to answer any question. Participants were also informed that they were free to terminate the interview early should they choose, but again no participant chose to do so.

An honorarium of 20 dollars (CDN) was provided to participants at the beginning of each interview, after the consent process was complete. The honorarium was provided to compensate participants for their time and any expenses associated with the interview (e.g., transportation costs). This amount was chosen in consultation with one of the community organizations assisting with recruitment and was consistent with honoraria provided to research participants in similar studies (Evans et al., 2009; Fuller et al., 2001). Participants were informed that they would not forfeit the honorarium if they chose to skip a question or terminate the interview process prematurely.

Confidentiality

Participant confidentiality was maintained in several ways. First, as verbal consent was obtained, no participant names were recorded. Furthermore, data were cleaned to remove any potentially identifying information. Permission was obtained from participants to use quotes (without personally identifying information) from their transcripts in my thesis and other forms of dissemination. These quotes will not indicate ages or place of recruitment and will not be given identifiers (e.g. codes, pseudonyms).

When not in use, data are stored on a password protected, encrypted flash drive, and backed up on a second password protected, encrypted flash drive, both of which are kept under lock-and-key at Stairs House (Dalhousie University). Only myself, my supervisor (L. Jackson), and my committee (J. Gahagan, J. Karabanow) have access to

the data. Audio-recorded interviews were deleted after transcription as per my ethics agreement, and cleaned transcripts will be kept for five years in a locked cabinet at Dalhousie University.

Risks of Participation

The interview discussed a sensitive topic and discussions may have touched on difficult or painful experiences. As such, the interview may have made participants feel uncomfortable. This risk was reduced by ensuring that participants were aware that they could chose to skip any interview question, and that they were free to terminate the interview at any time. I also had a list of community resources available for participants to take with them after the interview in case they wanted to seek out additional community supports.

There is also a risk that interview data could be subpoenaed. This risk could not be mitigated, but participants were informed of this risk during the consent process.

Participants were also informed of a researcher's duty to report abuse or neglect of a child under the age of 16 or an adult in need of protection.

Benefits of Participation

Corbin and Strauss (2008) note that "people have the right to let their voices be heard" (p. 29). The interview gave participants a chance to discuss their views and opinions about a subject that is relevant to them. It may have been cathartic for participants to have the opportunity to discuss their experiences (Patton, 2002). It may have also been empowering for participants to contribute to research in an area that affects their lives and have the opportunity to see their voices represented in the research. Charmaz (2006) notes that qualitative interviewing gives the participant the opportunity

to express his or her views and tell his or her story in a way that may not be allowed in other settings; to share significant events and teach the interviewer how to interpret them; and to be experts. Thus, participants may have received a benefit from participating in that the interviews may have given them the opportunity to be heard.

Ideally, the results of this study may help to inform the policy and/or practices of harm reduction services providing support for safer injection drug use in Halifax. The results may be able to suggest ways such supports could be more conducive to the needs of YWID in Halifax. Though this may not directly benefit study participants, this study has to potential to benefit similar populations of YWID.

Data Management and Analysis

The data management software used was Atlas Ti. The advantage of using computer software in qualitative data analysis is that the software provides the researcher with a system in which to organize and easily retrieve material (Creswell, 2007).

Methods of Analysis

Coding is the process of identifying themes in the data and developing the characteristics that define and describe these themes (Corbin & Strauss, 2008). Coding shapes the framework from which you build your analysis (Charmaz, 2006). Strauss and Corbin (1998) are more structured in their approach to coding than is Charmaz (2006); however both processes are quite similar. All approaches to grounded theory stem from the initial development of the field by Glaser and Strauss (1967), so while styles of analysis may have diverged, the basis on which analysis rests remains the same: split the data into its component pieces, then build it back up into a framework that offers a novel conceptual explanation of the data. Furthermore, Strauss, Corbin, and Charmaz all accept

flexibility in methods. Charmaz (2006) views grounded theory methods as "a set of principles and practices, not prescriptions or packages" (p. 9) and suggests that researchers adopt and adapt these principles and practices as necessary to conduct their studies. Strauss and Corbin (1998) note that grounded theory methods should be used "flexibly and creatively" (p. 8) and that analysts will not use every procedure outlined. Thus, the modified approach to grounded theory methods employed in this study borrowed from the work of Strauss and Corbin (1998), Charmaz (2006), as well as Corbin and Strauss (2008).

Before outlining the methods of analysis that were used, it is important to outline the purpose of this analysis. The final step in grounded theory is selective (Strauss & Corbin, 1998), or theoretical (Charmaz, 2006), coding. Selective coding is the process of integrating and refining themes – of selecting the foremost theme and relating the other themes to it (Strauss & Corbin, 1998). Selective coding reduces the data to represent the narratives of participants into highly conceptual terms. In other words, selective coding is the stage of analysis in which theory is produced and refined. My intent was to move the analysis of the findings beyond description, which "draws upon ordinary vocabulary to convey ideas about things, people, and places" (Corbin & Strauss, 2008 p. 53). However, it was **not** my goal to produce a theory, thus, the process of selective coding was not specifically undertaken.

Strauss and Corbin (1998) note that the creation of theory is not the only goal of doing research, and "conceptual ordering" can also make important contributions to knowledge. The idea behind conceptual ordering is to classify phenomena in explicit ways, but not necessarily relate the classifications together to create an overarching

explanatory scheme (Strauss & Corbin, 1998, p. 25). Charmaz (2006) notes that an "interpretive" definition of theory does not need to reach causality and linear reasoning but may instead show the patterns and connections inherent in the data (p. 126). Interpretivist theory emphasizes understanding of particular positions, perspectives, and experiences rather than explanation. Thus, it is possible to produce a theoretical rendering of the data without producing a fully developed theory. The desired end-goal of this research was a conceptual ordering of the experiences of YWID in Halifax.

I began analysis by transcribing the interviews and then reading and re-reading the text. Developing an initial familiarity with the data makes later analysis easier as the researcher has a strong foundation in the data (Corbin & Strauss, 2008). After becoming familiar with the text, I began open coding.

Open/initial coding. Open coding is the process of 'opening up' the text to get at initial ideas (Strauss & Corbin, 1998). During open coding, the data are fragmented into codes that may be examined, compared, and contrasted (Strauss & Corbin, 1998). Codes, or initial themes, stand for significant ideas contained in the data (Corbin & Strauss, 2008; Strauss & Corbin, 1998).

During the initial coding, codes were attached to text segments to describe the ideas I saw represented in the data. I used natural breaks and transitions in the text as cut-points, as per Corbin's recommendations (Corbin & Strauss, 2008). I attached descriptions to the codes to detail how I was using them and made use of frequent memowriting to describe my coding decisions and record patterns and themes I saw emerging in the data (Corbin & Strauss, 2008; Strauss & Corbin, 1998).

As the number of codes begins to grow, the analyst should begin to group codes into higher-order themes (Strauss & Corbin, 1998). This grouping allows for a reduction in the number of codes with which you are working (Strauss & Corbin, 1998). After an initial round of coding, I met with my supervisor and we discussed the codes and ways in which the codes could be collapsed and grouped into preliminary themes. I then revisited the data in light of the refined coding scheme to re-code sections of the text and continued to develop and refine the analysis.

Focused coding. The data that are broken apart into segments during open coding must be brought back together by relating these segments to one another (Corbin & Strauss, 2008). This process began when initial codes were collapsed and grouped, and continued from there. Focused coding is more conceptual than initial (open) coding and involves deciding which codes are most significant, and then re-visiting the data to categorize it completely by these most significant codes (Charmaz, 2006).

I began to map the most significant themes in the data and create relationships among the data within these themes and between these themes. As themes were explored and refined, some were broken down and added to other themes deemed more significant, while new themes were created to explain important ideas in the data not captured accurately by other themes. After many renderings of the focused code, data seemed to fit best when grouped into two substantive areas: the power drugs had over participants and how participants negotiated control of their injection practices; and experiences participants had trying to negotiate control over their drug use and gain power over the drugs. It is these issues of power and control within the context of participants' injection

drug use that form the basis of the conceptual ordering and will be explored in the proceeding chapters.

Data quality. Drawing on the work of Glaser & Strauss (1967) and Lincoln & Guba (1985), Corbin suggests that credibility is a useful quality evaluation when assessing qualitative research (Corbin & Strauss, 2008). According to Corbin, "credibility' indicates that findings are trustworthy and believable in that they reflect participants', researchers', and readers' experiences with phenomena, but at the same time the explanation is only one of many possible 'plausible' interpretations possible from the data" (Corbin & Strauss, 2008, p. 302).

Glaser and Strauss (1967) provide two criteria for assessing credibility, which are summarized by Corbin (Corbin & Strauss, 2008). First, the researcher must provide rich detail and description of the research 'field.' Chapters One and Two outlined the environment of injection drug use among youth, factors that may put YWID at risk, and available services and supports. Chapter Four will provide rich description of themes and make use of participant quotes to ground the analysis. Second, the researcher should detail how the data were gathered and the analysis conducted, which has been outlined in this chapter. I also made use of reflexive journaling (Lincoln & Guba, 1985) to document the research process and of memo-writing during coding and analysis to describe how I arrived at my themes.

In addition to credibility, Charmaz (2006) offers three additional quality criteria. Charmaz proposes a list of questions the researcher should ask him- or her-self during the analysis process to ensure that the analysis of data is original, resonates, and is useful.

Corbin notes that Charmaz's criteria are useful to assess both the scientific and creative aspects of qualitative research (Corbin & Strauss, 2008).

To assess originality, Charmaz (2006) suggests the researcher ask questions pertaining to the novelty and significance of the research findings, such as "does your analysis provide a new conceptual rendering of the data" (p. 182). While many of the findings of this study confirm current literature, the experiences of YWID in Halifax specifically provide a novel context from which to gain a greater understanding of how YWID understand and practice safer and/or unsafe injection drug use.

To assess resonance, Charmaz (2006) suggests questions such as "does your grounded theory make sense to your participants or people who share their circumstances?" (p. 183). As it was not possible to return to the research participants to discuss the data, I have relied on the expertise of my committee and current literature to ensure that my explanatory framework makes sense.

Finally, to assess usefulness, Charmaz (2006) suggests questions such as "does your analysis offer interpretations that people can use in their everyday worlds?" and "can the analysis spark further research in other substantive areas?" (p. 183). The analysis of results may be useful to inform policy and practice of community-based organizations working with YWID in Halifax. Furthermore, the analysis of this study data has shed light on areas in need of further exploration, which will be discussed in Chapter Five.

As Charmaz's (2006) criteria rest largely on self-evaluation, in addition to self-reflection I sought the expertise of my supervisor and committee members to ensure that my analysis was credible, original, resonated, and was useful. The process of peer review

is meant to keep the researcher honest about and reflecting upon the methods and interpretations of the analysis (Lincoln & Guba, 1985).

Limitations

As community-based organizations were the only source of recruitment, all participants were in contact with harm reduction supports and services. Thus, participants' experiences with safer and/or unsafe injecting practices may differ from YWID who are not in contact with harm reduction supports and services. Attempts were made to use snowball sampling to recruit participants not in contact with community-based organizations, however this method of recruitment was not successful. Furthermore, half of the participants were recruited from an organization working primarily with street youth, thus recruitment may have been biased towards youth who were marginally housed.

The definition of youth used in this study extended from 16 to 29. With this definition, there was a wide age range (18 to 29) among participants. As noted, the Nova Scotia Advisory Commission on HIV/AIDS defines youth as 15 to 29 years of age, and several studies of YWID have used an age range that extended to 29 (Cronquist et al., 2001; Evans et al., 2009; Miller et al., 2007; Nova Scotia Advisory Commission on AIDS, 2003; Roy et al., 2007), and for these reasons youth were defined in this study as 16 to 29 years of age. Given that the average age of initiation to injection drug use is around 19 to 23 years of age (Fuller et al., 2001; Goldsamt, Harocopos, Kobrak, Jost, & Clatts, 2010; Small et al., 2009), using a younger definition of youth may have yielded a very limited sample; however, there may be differences between older and younger youth

that this study was not able to identify. Additionally, no participants aged 16 or 17 were recruited, thus the voices of very young youth were not represented in this study.

This study was a small, exploratory study looking specifically at the experiences with safer and/or unsafe injection practices among YWID in Halifax. The depth of the interviews and interview data were limited by the time constraints of a Masters thesis and my limited experience as a researcher. Furthermore, I also had a limited amount of time to develop rapport with participants, thus participants may not have felt fully comfortable sharing with me, and this may have limited the depth of the data as well. There is also a possibility that participants were responding to questions in a socially desirable manner; however, a literature review of self-report data among PWID notes that these data are generally reliable (Drake, 1998). The experiences these youth shared have merit and are important and worthy of analysis; however, one cannot expect from 10 interviews that this research study has explored the full range of experiences of YWID in Halifax. Thus, the analysis offered here is one derived from a snap-shot of the experiences of 10 youth and should not be interpreted as representing the complete experience of all YWID in

Dissemination

The results of this study are being disseminated through both academic and community forums. The results of this study comprise the material for my Masters thesis and defence. I have also pursued opportunities to present the findings of this research at various conferences, such as Crossroads Interdisciplinary Health Research Conference in March 2013 and the Issues of Substance Conference in November 2013. I am also

preparing a paper for submission to an academic journal, such as *Harm Reduction Journal*, *Journal of Child and Adolescent Substance Abuse*, or *Substance Abuse*.

I am also preparing a pamphlet providing a brief overview of the results for local community agencies. The pamphlet may be of interest to local community organizations as it may give them an opportunity to hear the views of local youth as they pertain to safer and/or unsafe drug injection practices, a topic which may not be widely discussed. During interviews, many research participants expressed an interest in viewing a summary of results and they were informed that this pamphlet would be openly available in early fall of 2013 at the community organizations in which they were interviewed if they wanted to see the results of the study.

Chapter Four: Results

"I'm an addict.' [...] after a while it's not a choice, it is a choice, it is a choice, but it's like a very enthralling choice you don't see as a choice anymore. Like the physical part is so overwhelming that you don't feel that there's a choice, you know what I mean?"

(A youth who uses injection drugs)

This chapter presents the results of data gathered from qualitative interviews with 10 youth who use injection drugs. All interviews were conducted in Halifax, Nova Scotia, and participants were between the ages of 18 and 29. Opioids (e.g., Dilaudid, OxyContin) were currently the primary drug of choice for all participants, and everyone reported that they had injected opioids in the past 30 days. Most participants were currently homeless or marginally housed, and most participants had as their main source of income some type of social program (e.g., social assistance, disability).

The presentation of results will focus on challenges and opportunities to reducing the harms of injection drug use as described by these youth. Their stories can be categorized into two major overarching themes. The first theme, **Drugs, Power, and Control**, refers to the power that drugs (e.g., opioids) have over the lives of these youth, and their attempts to take control over the safety of their drug use practices and thus control the impact the drugs will have on their lives.

The second theme, **Gaining Power Over Drugs**, will discuss youths' experiences with "getting clean," or reducing or eliminating drug use. This theme will discuss what "getting clean" means to participants and the different ways in which they are attempting to take some power back from the drug.

While the proceeding sections elaborate on situations in which the drug may have more or less power and the individual may have more or less control over safer practices, it is important to note that the framing of participant stories in terms of 'power' and 'control' is not meant to represent a binary conceptualization of power and control in the lives of these youth. Where power and control are located is not absolute, but rather fluctuates depending on different individual experiences, life stages and drug use stages, as well as the local environmental and broader social environmental conditions in which drug use takes place. Where power and control are located should be conceptualized as operating along a continuum, where individuals can move back and forth between having more or less power over their drug use and control over drug using practices at different times and in different situations.

Theme One: Drugs, Power, and Control

A major theme throughout all interviews related to drug use itself, and how drug use impacted almost all aspects of the youth's lives. For most participants, their lives revolved around their drug use and many referred to themselves as "junkies." They talked about the power that using drugs had over them, and how their drug use crept into nearly all facets of their lives. Drugs were the first thought many participants had when waking up in the morning, and some also made sure they had enough money when they went to bed to purchase drugs the next morning. Indeed, drug use impacted them from the time they woke up until the time they went to sleep. The drugs were their primary concern at the expense of everything else, even basic necessities like food and shelter.

When participants were regularly using, drugs were the most important, most powerful part of their lives:

When I was using everyday I didn't really care at all about anything. So, drugs were all I cared about.

When you're a junkie all you care about is the drug use and the drugs. I mean you stop caring about your personal health, you stop caring about where you live, where you stay at night, and you definitely stop caring about your nutrition.

Participants talked about when they first started using drugs and how they progressed to injecting drugs. Most participants had histories of using multiple drugs, although a couple had initiated drug use with and continued to use mainly opioids. Many had started using drugs or alcohol as pre-teens or teenagers. In many cases, they started with alcohol and/or marijuana or by taking opioids orally and their use progressed as they aged:

Well when I was younger I started drinking because my mom was a drinker [...] And then it went on that to marijuana and that to drinking and taking ecstasy, from that to cocaine to that to Dilaudid, to pretty much anything.

I started doing pain killers in high school, um, really started in like grade, even before high school, I was in grade 7,8,9, I just started eating them...high school I started snorting them, and I've been using IV now for about 6 and a half, 7 years.

Most participants had long histories of drug use relative to their age. The longest drug career⁷ mentioned spanned 15 years:

I've been struggling with this for 15 years and, yah...I understand how people say that it's a progressive disease.

Participants' initiation to injection occurred between 13 and 27 years of age.

Reasons for commencing injection included curiosity and seeking a better high due to increasing tolerance:

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⁷ The concept of a "drug career" refers to the way in which the lives of (some) people who use drugs revolve around their drug use – drug use becomes the principal role and activity around which the individual organizes his or her life (Faupel, 1991).

I – Do you remember why you started injecting?

P-I did it the first time just to try it. Like to see the difference.

I – Do you remember why you started injecting?

P - Just because I had built up a tolerance and I wasn't getting high off the drug any more, and thought that if I shot it, that I would get high off it.

Participants discussed injecting careers that spanned one month to over six and a half years. They spoke of the power of injecting, or the power of the feeling of the drug when injected. Moving to needle use had an impact on their drug use. Some participants indicated that it was the high from injecting – so the power of drugs specifically when injected – that consumed them. Using drugs in another method was no longer as exciting - transitioning out of injecting was seen as a de-escalation of use. For some, using via another method was no longer even acceptable – they would wait until they had a needle. The act of injecting was intimately tied to their drug use:

She put the first needle into my arm, and from then on I've been hooked. And all it took was one needle, and then basically I've been hooked ever since.

I remember one night [...] it was late at night and I got something and I was so sick [...] and I was just like counting on [pharmacy] being open because I had no needles, and ah... that's the thing about being a junkie too. I could aate that pill and I wouldna been sick, but I waited until I had a needle to do it. Like suffered [...] so I could shoot it.

One participant was trying to describe for me the feeling of injecting opioids ("doing a pill") and was struggling to come up with the right words. She resorted to sound effects before finally settling on the word "orgasmic:"

Like, usually, when you're not on methadone, when you do a pill, you're like...booof, like, whoa...just looped, right? Not looped, but you feel it, it's like a brick wall...like...whooaaa...um, orgasmic.

Thus it is not just drug use, but injection drug use, that is central to the lives of these participants. Most had not commenced drug use with injecting, however now that they were injecting, for most participants, injecting was a primary component of their drug use. The use of opioids, and specifically the use of opioids via injection, had a significant amount of power in the lives of these youth. It occupied their time and money, impacted their relationships, constantly infiltrated their thoughts; it crept into all aspects of their lives. Their lives were built around their drug use, and, in a sense, they were somewhat powerless to the drug. Within this power of the drug, efforts participants made to use safer can be seen as efforts to control the impact and effect that the drug would have over their lives.

Subtheme One: Access, Power, and Control

In order to practice safer injection drug use, YWID need access to the supplies that facilitate this. Participants spoke of the places through which it was possible to acquire clean needles and other injection-related paraphernalia, including the local needle exchange program (NEP), pharmacies, and, at times, the hospital. The drugs were a powerful force in their lives. Services that provided access to clean supplies necessary to use their drug allowed participants to gain some control over how the drugs were consumed (e.g. safer versus less safe); only by having this access to clean supplies could they engage in safer practices.

For all participants, the local needle exchange program was the primary source of access to clean needles and other injection-related paraphernalia. The NEP had all the clean supplies participants needed, including needles, cookers, pre-cut filters, and sterile water. Furthermore, needles were offered via distribution rather than exchange and no

limits were placed on the number of supplies that could be obtained nor was there any cost associated with getting supplies from the NEP. A few participants noted that if you had access to the NEP, there was no reason to use unsafely:

[The needle exchange program] is really good I think. They pretty much like give you anything if you need it, so as long as they're accessible to you, there's no really reason to be using unsafely I don't think.

All participants also felt comfortable going to the NEP. The social environment of the NEP, and in particular the staff, was described as supportive:

[The staff at the needle exchange program are] always so generous and happy to see you. And they're not happy to see you because of what you're doing, but they're just happy that you're being safe, so I like that.

Thus, access to all needed injection-related supplies and a non-judgmental environment made the NEP the clear first choice for participants when accessing clean supplies.

Though the drugs may still maintain a lot of power over many participants, by providing easy access to clean supplies, the NEP gave some power back to participants in that it provided a way for them to control the safety of their use.

There were, however, a couple of challenges that participants noted in relation to accessing clean supplies from the NEP. These challenges related to the hours the NEP was open and where it was located and created barriers to the amount of control participants had over safer use. One participant felt that the hours of the NEP gave him sufficient time to come pick up his supplies:

[The NEP] is open 7 days a week and during the week it's open till 3 o'clock, right from 8:30 till 3 o'clock anytime I can come pick up all my clean supplies, so that's definitely a good window. Um, the only problem is, is ah, weekends they close early, so I guess 12 o'clock by, you have to pick up your supplies by. So I don't say that it's a problem, I'd say that it's a pretty good amount of time for you to come in and get what you need.

However, this participant did note that the NEP closed at 3pm, and earlier on weekends. For many participants this was a problem and they noted that it was difficult to access needles at night and/or on the weekends: "weekends are harder because [the NEP]'s not open for the same hours." One participant also noted that it was difficult to get to the NEP during open weekday hours because of his job.

Many participants either resided close by or they came to the area in which the NEP was located daily to access the nearby methadone maintenance program. These youth had no problem accessing the NEP: "that I'm down here by [the NEP] everyday makes it a lot easier to get clean supplies whenever I need them." However, some participants noted that they currently lived, or had in the past lived, some distance from the NEP, which sometimes made getting there difficult: "when I was living [outside of the city] for example, [...] and I couldn't come down here to [the NEP]."

Thus, in order for participants to be able to access clean supplies through the NEP, they needed to be able to get to the location during the day and obtain sufficient needles until the next visit. While the NEP was the preferred source of clean supplies and afforded participants an opportunity to control the safety of their use, it may only afford this control at certain times and from certain places.

The NEP does offer a delivery service to overcome the challenge presented by a single location. Some participants knew of, and used, this option: "[the NEP] actually comes by and drops [needles] off at all my friends' houses." Other participants did not know about this option: "I don't know anything about like the van that goes around [...], but I think that's a really good thing, and if people knew how to get it, then that would probably help them be safer".

On occasions when the NEP was not accessible, the majority of participants noted that a pharmacy would be their second choice for accessing clean needles: "sometimes I buy [needles] from the pharmacy, it depends on if it's open or not at [the NEP]." The pharmacy, however, was generally not described as positively as the NEP. There existed several challenges to accessing clean needles through the pharmacy, including the cost and pharmacy locations and hours.

The most pressing challenge to accessing needles through the pharmacy was the cost. While needles are freely distributed at the NEP, at the pharmacy needles must be purchased for a fee. Participants' drug use had power over their finances – their money went to purchasing drugs. Some participants noted that the cost of needles at the pharmacy could create a barrier to accessing needles there. The pharmacy was only an alternate option to the NEP if participants had money to purchase needles:

I – So if you can't get them [needles] from [the NEP], you go to the pharmacy? P – I try to if I have money.

The hours and location of a pharmacy could also present a barrier to access.

Pharmacies were often turned to when the NEP was closed. However, not all pharmacies operate 24-hours a day, or a 24-hour pharmacy could be inaccessible based on its location; thus a pharmacy that was accessible may be closed at times when clean needles were needed, or vice-versa:

P-[...] if the pharmacy's even open, because sometimes it's two am.

I-Are there any 24-hour pharmacies that supply needles?

P – They're usually like out in [suburbs] and stuff, and by then buses aren't [running].

Thus, like the NEP, the hours or locations of pharmacies could also limit access to clean needles. Though the pharmacy offered an alternate source of clean needles and provided another way for participants to control the safety of their use, it still had barriers that limited this control. Twenty-four-hour access to clean needles was generally not available.

An additional challenge to accessing clean needles through the pharmacy related to the social environment of the pharmacy. Several participants noted that they felt uncomfortable and/or judged when trying to access clean needles at a pharmacy. Many youth had adopted a strategy of pretending to be diabetic so as not to reveal that they wanted the needles for drug use: "I go and tell them that I need diabetic syringes and ah, pretend to be diabetic basically, and they'll give me a pack of 10." One participant noted that her experience at the pharmacy was so uncomfortable that she left without acquiring a clean needle: "I panicked and ran out of there." However, not all pharmacy experiences were negative. Some noted no uncomfortable experiences related to pharmacies, and one participant had found support on one occasion when trying to access clean needles at a pharmacy:

Like the pharmacy even opened a bag that someone would buy and got me out two. The pharmacist was like, 'well I can't see you go without', she's like 'I don't want you to re-use a needle that you had last week,' and I said, 'well thank you very much,' so that was helpful.

The hospital was also discussed by a few participants as a potential source of clean needles. One participant had, on occasion, accessed clean needles and other paraphernalia through the hospital:

P-I've gone to the hospital and gotten like blue rubber tourniquets, and fresh kits and needles.

I-And they're good?

P-Um, they don't really, (sighs), like in the back of their minds like they're judgmental, but they don't really say anything, you know what I mean?

While this participant had successfully accessed clean supplies from the hospital, he also noted that the hospital staff did not seem overly willing to distribute these supplies. In the other instances when the hospital was mentioned during interviews, however, it was not seen as a viable option for clean needle access, in particular due to barriers the hospital staff created to accessing needles. One participant, for example, had visited the emergency department on occasion for issues related to injection drug use, such as cotton fever. This participant had found the social environment of the emergency department particularly negative and would not feel comfortable seeking needles there:

I-Have you ever tried, or would you ever try, to go to the hospital to get needles?

P-No, because I've gone to the hospital for like IV-related things, and I'm always judged so harshly, like the, triage people? They're so rude, like when they find out that you use IV, they're like, you can literally see the disgust on their face.

Another participant had previously been denied needles from the hospital: "And they said, 'nope.'" Thus while clean needles may potentially be available through hospitals, the barriers to acquiring them may make the hospital an unrealistic option for many YWID. Hospital staff were judgmental and inconsistent and overall the hospital did not positively contribute to participants' ability to control the safety of their use.

Accessibility

In talking to participants about how they accessed clean needles and other supplies, there seemed to be a meaning ascribed to *access*. While clean needles are *accessible* at the NEP, at pharmacies, and even, at times, through a hospital, this did not

necessarily mean that they were accessible at the time of need. In addition to the practical barriers mentioned above in relation to accessing needles through the NEP, a pharmacy, or the hospital, there was an additional barrier related to having access to clean needles in the moment of need. It may be more appropriate to say that clean needles were available through these services, but whether or not clean needles were accessible depended on the specific situation in which participants found themselves. Recall that the drugs are a very powerful force in the lives of many participants; as one participant noted, he "couldn't wait. I mean for me to have [drugs] in my hand, and tell me I had to walk a mile? No." If the need for the drug was immediate, supplies needed to be immediately accessible as well. Thus, while clean needles are available through the NEP or pharmacy or (possibly) hospital, in the moment of need, participants may not have felt that they had access to clean supplies. Access then takes on a dual meaning. On the one hand, there are resources that provide access to clean needles and this access enables participants some control over safer use. However, on the other hand, an individual may not have constant access to clean needles. If access to clean needles means access at the time of need to participants, then clean needles are not always accessible and thus control over safer use may not always be attainable either.

Location of Use

Participants' locations of use varied, but the primary locations in which use occurred were homes, public washrooms, and outdoors. Some participants had preferred locations in which they tried to always use: "I use in public bathrooms basically. Ones that I can lock myself in and I don't get bothered by anybody. [...] Those are the best types of spots to use," while for others, their location of use was more fluid: "I'll do it

[inject] anywheres, I really didn't care." Location of use had an impact on safer use: certain locations seemed to influence access to necessary supplies, influencing the control participants had over safer practices; and certain locations were described as being more or less safe, indicative of the amount of control participants had in these locations.

Using in a home was described by several participants as safer. Using at home gave participants access to all the supplies they needed: "I prefer to be at home where I have everything." Another participant used in the homes of drug-using friends where again needed supplies were readily accessible. Participants who used at home or in friend's houses had the ability to store large quantities of clean needles and other supplies to help ensure continued access:

At first when we were using, my girlfriend already had a big box of needles, she used to pick up the big box of needles, a hundred at a time, and so we'd be using the needles straight out of the box there, and just spoons at home basically, so all of our stuff was done at home.

As a home location afforded the opportunity to store supplies, it offered participants the ability to easily control how clean their use was when using there.

On the other hand, locations where participants may not have access to all the clean supplies that they needed may be less safe. When using in bathroom stalls or outdoors, for example, participants explained that they often found themselves missing something they needed to prepare the injection. Participants who were using in public did not have the option of storing large quantities of needles but instead had to carry their supplies on their person, meaning that their ability to access many clean needles and lots of supplies was more restricted: "instead of picking up a box [of 100 needles], I just pick up my supplies for the day." As using in public gave participants less access to needed supplies, missing supplies would lead to "make-shifting," or making use of what was

available. Examples of "make-shifting" included using a pop bottle as a cooker or a cigarette butt as a filter: "usually we're missing something, whether it's a filter, you have to pick up a butt off the ground and take the filter out." Access to water was also described by several participants as difficult when using outdoors or in a public washroom stall, which could lead to using puddle water or toilet water as rinse:

Like if you're using in a public place it's harder to be safer because you're trying to like hide it from everybody, so if you're like stuck in a bathroom stall and the only water you have is sitting next to you in a toilet, then that's kind of, you have to do that.

Other participants described a strong dislike for using in the homes of other PWID as their homes and supplies could be unclean, or they might expect something from you, such as your wash or a pill, in return for letting you use in their house. Thus participants using in more public locations seemed to have less control over access to clean supplies in these locations and thus less control over practicing safer use.

Additionally, participants who used publicly noted that certain locations were entirely unsafe and should be avoided. For example, one participant perceived that the areas around a particular local shelter were particularly unclean and unsafe, and "kinda stayed clear of those areas," while others had been caught using in a certain public location too many times and now avoided this location: "I've been kicked out too many times." Avoidance of certain locations deemed entirely unacceptable may be a way for those youth with less control over their location to exert some control – they could be safer by avoiding the public locations that were really unsafe.

Of note, locations that for one participant were safer could be less safe for another participant. How the location was perceived by that youth could influence whether or not the location was safer or unsafe to them. While one person felt in control when using in a

public washroom, others did not. While one person felt safer using in friends' homes, another was very distrustful of using in other people's houses. The control that participants felt they had over their location of use and their access to supplies in that location seemed to be the factor that determined whether the location was safer or unsafe. Though the drugs may still have had the power, controlling the location gave participants control over practicing safer use.

However, even among those participants who were comfortable using in a public location, public use, and especially outdoor use, was not described as ideal. Several participants often or usually used outdoors, but no one preferred to use outdoors because "you're out in the elements. It's harder to find a vein because of the cold, um, police just walk up and find you." Using outdoors left participants vulnerable to the elements (e.g., wind, cold), and to police intervention, and was also associated with missing supplies and "make-shifting." Using outside appeared to diminish the control participants had over safer use.

Withdrawal

Withdrawal had a very strong impact on many participants' ability to practice safer use. Being in withdrawal, or being "sick" or "hurtin," was noted as an occasion during which less safe practices, including sharing, could potentially occur:

P – But when you're so sick you just, you don't care. You needa get it inta ya.

I – So those would be like situations where...

P – *Where I shared wit' people, yeah.*

Many participants spoke of experiences they had where they had been "hurtin" and had resorted to less safe practices to relieve withdrawal symptoms: "if I'm really hurtin', like

a, take a pop can and cut off the bottom of it, and that's like a little bowl kind of thing."

Several participants agreed that using less safely when "hurtin" was somewhat common:

It's hard to actually find someone who could honestly say like 'I have never shared a needle or used someone else's needle,' cause when you're desperate enough and you're an addict and it's between being sick and using a [dirty] needle, you don't really think about the risks.

The influence, or power, that being sick had on participants was striking. In many cases, being "hurtin" seemed to over-ride the ability to practice safer. All participants understood the importance of not sharing, but the prospect of being able to alleviate symptoms of withdrawal, even if it meant injecting from a needle visibly contaminated with someone else's blood, was "relieving." When in withdrawal, feeling better (alleviating withdrawal symptoms) was the primary concern, not using safer. In withdrawal, the drug, not the person, had the power, and many participants would do what was necessary to feel better:

So this friend she uses, and um, I was really sick, and she had the remnants of a pill, enough to make me not sick, or make me feel a little bit better. But she's already done it, so there was her blood in it [in the needle]. [...] and I [...] was just so like relieved that there was something there, and then I saw the blood in it and I didn't even care.

Withdrawal was a factor that could greatly complicate access to services and supplies. Though, *theoretically*, participants had access to needles through the NEP, pharmacies, and for some the hospital or their homes or friends' homes, when faced with the *reality* of being in withdrawal, primacy was given to the need to relieve withdrawal, and access to safer supplies became secondary. When in withdrawal, the power of the drug dampened participants' ability to control the safety of their use – if clean supplies were not immediately available, alternate supplies were sought:

Usually like I said I'll try to use a clean, if I can't find a clean then I'll use a dirty one [re-use], if I can't find a dirty one than I'll use yours [share]. [...] If it's available you'll use it, but if it's not available you'll find another way.

It is important to note, however, that withdrawal was not a concern for all participants. One participant noted that she was not "that far gone" and if she did not have clean needles, she just would not use. Another participant was actively trying to reduce his use and avoid injecting and also would not inject unsafely:

I always try to have clean supplies, and usually like I'll hold off, I guess is what classifies me as like not so much of an addict, is like I can hold off until I get clean supplies, you know what I mean?

In all interviews where participants talked about concerns with withdrawal, however, the potential for unsafe practices to occur when in withdrawal was acknowledged.

Exercising Control: Strategies to Facilitate Safer Use

The drugs held a lot of power over participants and not having ready access to clean supplies negatively impacted many participants' ability to control safer use practices. Participants also, however, described strategies that they used to overcome barriers and exercise control over safer use, such as needle distribution among peers and planning ahead to have needles available when needed.

The importance of peers: secondary distribution and reciprocity. Many participants noted that drug-using peers were an important source of secondary needle distribution. Secondary distribution occurs when an individual acquires an excess of clean needles from a needle exchange program (or other primary source of clean needles), and then distributes these clean needles to other drug users. Secondary distribution was useful for facilitating access to clean needles, especially at times or in places where access to formal services was difficult.

One participant explained that within his network of drug-using peers, people would get boxes of 100 needles from the NEP and keep them at their homes for use within the network.

Well a lot of my friends, this is what I find's happening, is that people will get a box of 100 from [the NEP], then when people get a box of 100, it's, their circle of friends knows that they have clean rigs, so then everybody will go there when they need one, then when that person runs out, we'll know well then this person has some and we'll go there and get some.

By creating their own de facto needle distributions, this participant's network of drug using peers increased access to clean needles. The individuals who were obtaining large numbers of needles and ensuring this supply continued were not only increasing the safety of their own use, but allowing their friends to have greater access to clean needles and thus a greater ability to practice safer use as well – the suppliers were increasing the control of the entire network. While this distribution network did not overcome all barriers to accessing clean needles to all network members (e.g., needing a needle in the middle of the night when needles are not stored at your house), this participant noted that he and his network lived outside of the immediate area of the NEP (i.e., were not within reasonable walking distance), and thus this network may have been particularly useful at overcoming the barrier posed by location of formal services.

Other participants spoke of certain geographic locations in the city, such as areas around which shelters were located, as sites of secondary needle distribution. These participants noted that because other people who use injection drugs frequented these geographic locations, clean needles were often available there. For example, over weekends when the NEP was less accessible, one participant noted that she could go to

one of these locations if she did not have any needles, and someone there would have extras to distribute:

I've had times when I didn't have rigs, but there's always people who have clean ones. [...] Yeah, at [place] there's at least at any given time three other junkies [...] who'll have one. [...] There's always like a couple people who stock up for the weekend [...] I've done that a couple times. I know a couple people who've done that down at [place].

Likewise, another participant mentioned that he would pick up extra clean needles if he was going to a location frequented by other PWID, and then distribute them to people who were in need:

I used to carry around extra clean kits in my backpack for like other junkie users, like friends of mine that I know use and [...] when I'm at [place] or whatever and I see like crack heads scrounging around for like a needle an' it's like well here, I got a clean one right here.

Similarly, other participants spoke of times when their friends had gone to the NEP or a pharmacy to pick up needles for them, or when they had gone to the NEP or a pharmacy to grab needles on behalf of another user: "well one person was asking me, because they didn't have any clean rigs, and I said 'just wait, I'll go to the pharmacy, you can wait 10 minutes,' and they're like 'okay.'" Thus it appears from these youth that they, and others, are actively involved in providing access to clean needles. By making clean needles more available in the drug-using community, these youth and their networks of drug-using peers are helping to mitigate the effect of the power of the drug by increasing control over the ability to practice safer use.

In addition to facilitating secondary needle distribution, drug using peers also helped some participants avoid withdrawal by facilitating access to drugs. Withdrawal is a situation in which the drugs hold a lot of power and thereby is a potential barrier to safer use; having help to avoid withdrawal could potentially contribute to being able to

practice safer use. A couple participants spoke of norms of reciprocity, or "a karma thing", within their networks of drug-using peers. These youth spoke of going on "the hunt" for drugs together with their drug-using friends and also explained they would split pills with friends who did not have pills or were in withdrawal who would, in turn, do the same for them:

You form bonds with these people, right. Like if, we take care of each other, you know. Like if your friends are sick and you only have [...] like a [small amount of drug], that's just enough for someone not to be withdrawing. And if someone does the wash, it makes them like a little better. [...] So like if you only have a [small amount] and you end up splitting it 4 ways, it's like, but people do that, you know, to help their friends out.

Norms of reciprocity were not seen as beneficial to all participants, however. Other participants found the expected reciprocal exchange when using with others taxing rather than helpful: "everybody wants something out of it, you know."

In addition to helping avoid symptoms of withdrawal, drug-using peers could also directly help to prevent unsafe practices. One participant explained that among her drug-using peers, people watched out for one another and protected others from making bad decisions, particularly when the bad decision was being made out of desperation while withdrawing. She described an occasion where she had prevented her friend from injecting with a used needle that had potentially been contaminated with Hepatitis C:

And I've had to be like, 'No!' and rip a needle out of my friend's hand. We take care of each other like that you know, [when] there's like moments that, where you lapse of judgment.

Having someone watching out for you at times when your judgment about safer and/or unsafe use may be clouded (e.g., by withdrawal) could prevent unsafe use. Thus, in addition to facilitating access to clean needles, having a network of drug-using peers could also potentially protect youth from the power of the drug. Having people to help

you avoid withdrawal and to prevent you from making poor decisions regarding safer and/or unsafe use when in withdrawal could buffer the effect of the power of the drug, and particularly the power of withdrawal.

Planning Ahead and Needle Re-Use

Although participants had several ways in which to access clean needles, certain barriers (e.g., time of day, location, cost, being in withdrawal) could at times make this access challenging and thus clean needles were not always accessible. Participants acknowledged that they always needed to have access to needles and occasions where they lacked access to needles were times when sharing *could* potentially occur. Participants spoke of planning ahead as an additional strategy they used to ensure access to needles and prevent sharing.

Many participants acknowledged that they were "gonna use everyday" and "always" needed to have access to needles. Planning ahead was a strategy to help ensure constant access. Some participants spoke of how it was necessary to plan to get to the NEP during the time it was open. However, on the whole planning ahead was more about ensuring access to needles at times when the NEP, or another source of clean supplies, was not accessible. Many participants kept their own needles to re-use throughout the day:

When I pick up a pack of 5, I've used the 5, and I've probably re-used one of my needles once or twice. [...] If you end up doing more, and you end up going through all your supplies, you just gotta re-use your supplies.

Participants spoke of keeping needles in their purses: "always carry it in your purse.

Cause you know you're always gonna need it" or jackets: "I would always in my jacket

pocket have a couple old rigs, I would always have a couple old syringes just in case I

couldn't find a clean," to ensure continued access. Several participants spoke of planning ahead to keep old needles or stock up on clean needles for the weekend in particular (a time when the NEP had more restricted hours). Planning ahead for the weekend seemed common practice, as one participant re-marked:

There's always like a couple people who stock up for the weekend, they'll get like a hundred, a couple hundred boxes or something like that. And just like leave them [at a certain public location] for people.

It is important to note that planning ahead did not necessarily mean planning ahead to have access to *clean* needles. Much of the dialogue surrounding planning ahead involved planning to keep *your own* used needles to re-use. Re-use, though "not ideal," was preferable to use of another's used needle and was acceptable when the alternative might mean sharing: "It's not ideal, but it's better than using someone else's." A lack of access to needles was one of the conditions under which sharing might occur, and planning ahead was a strategy used to specifically avoid sharing. When access to the NEP or another source of clean needles was uncertain, planning ahead to keep one's own needles for re-use helped participants control their use by helping them to avoid sharing and thus practice 'safer' use. Planning ahead and re-use could thus be seen as participants gaining control over the power of the drug: they could plan ahead in an attempt to ensure continued access to a 'safer' needle and reduce the risk of sharing.

Subtheme Two: Meaning, Power, and Control

Participants were asked to describe what they thought was meant by safer use.

Participants attributed two meanings to safer use – it meant clean use and controlling the amount of drug used. Clean use was also tied to their identity as users – by using clean,

participants could be clean users. Participants also said that safer use was important to prevent the transmission of blood borne illnesses, and safer use could be facilitated through a good understanding of safer use practices.

Using Clean

All participants spoke about safer use as "clean" use. Clean use included using clean needles. For all participants, sharing needles had no place in clean use, and for many participants, though not all, it was also important not to share any injection-related paraphernalia, or to "not sharing anything" in order to use safely.

For many participants, clean use also included having a clean injection site, which referred to both the injection site on the body and the physical site in which use occurred. A clean body site meant keeping the "injection site clean" by washing your hands before injecting and/or using alcohol swabs, and taking care of your veins. A clean physical site, or location of use, meant using in a place that was clean, cleaning up after yourself, and in particular, properly disposing of used needles:

Like usually, after I use my needles and everything I have a bag that I put them in that's a dirty bag, and I'll bring them [to the NEP] after just so they can dispose of it properly. That would probably be one of my safer practices.

Thus using clean can be seen as the processes necessary to have control over drug using practices and lessen the impact of the power of the drug.

Participants also took care to make sure their use was clean when using in the company of other PWID. For some, this meant they avoided using with other people.

One participant, for example, had negative experiences using with others and felt that using with other PWID was dirty. When asked to describe things that may be unsafe, this participant said:

Usin' with other people. Their needles being around. Usin' in other peoples' houses, where there's like, sometimes they're really dirty.

As a result, being clean meant using alone for this participant. Likewise, another participant stressed the importance of avoiding the use of dirty washes: "Never [accept] washes from people unless you've seen them do it up with all clean things." Thus, some participants felt unsafe using in situations where they were uncertain of the practices – or rather the cleanliness – of those around them. To use clean, it appears as though participants needed to feel in control of what was happening around them. For participants who did regularly use with other people, they stressed that the people they used with were also clean users: "Yeah, a lot of, the people that I hang out with, and most of the people I know are really safe. Like obscenely safe."

What constituted clean use practices, however, was not black and white. Re-use of needles seemed to be a common practice linked to planning ahead and preventing needle sharing among participants. One participant felt that re-use was perfectly okay, but another participant felt that it was important to always use new needles. However, for many others, this distinction was less clear and they would re-use needles when necessary. Re-use was "not ideal;" many participants were aware that re-use was not a 'safer' practice as it put them at risk for infections and vein damage, and re-using needles was also painful as needles became dull. However, re-use was safer than sharing as it did not put participants at risk of blood borne illnesses: "I'm not giving myself something." Re-using their own needles, for many participants, was a strategy they used to have more power over their drug using practices. Usually participants referred to needles for re-use as "a used one," "my own needle," "a dull needle," or "old rigs." Re-used needles

were less often referred to as "dirties." For most participants, re-use was not ideal, but it was not "gross."

Being "clean junkies." Using "clean" allowed participants some control over their drug use practices. Furthermore, using clean allowed participants to make themselves as drug users 'cleaner': "it's just a gross habit. So if you can be clean about it, then it's not so gross." Using clean was how these youth could be safer users. By taking steps to acquire clean supplies, care for the bodily site of injection, and make the location of use clean, participants could have more control over the cleanliness, or safety, of their use. Using clean made them "clean junkies"; it made what they were doing "not so gross."

Many of the youth counted proper disposal of used needles as one of their safer practices and were very bothered by other "dirty" users who did not do this:

It's gross finding a dirty kit, like people aren't clean, they don't properly dispose of [needles], that's what pisses me off the most is like when I'm walking and like I find dirty needles lying around.

Even though sometimes the location of use was not ideal, cleaning the injection site helped to make participants clean users:

I'm very clean about my usage, but ah, I use in public bathrooms [...]. It's usually a one-person bathroom [...] and you can clean up yourself after, you can clean everything up after, and it's probably the best way to do it, I think.

Cleaning up and disposing of dirty supplies was a way for participants to ensure that their use was clean, and being clean made them less "gross" than people who did not clean up after themselves.

Participants juxtaposed their accounts of being clean junkies with examples of unclean practices of other PWID. Several participants described unsafe practices they

had witnessed in other PWID, and these practices were generally practices that participants found "gross," such as using spit as rinse or picking needles up off the ground to use. By describing unsafe practices of other users, participants distanced themselves from these "dirty" users. In a sense, descriptions of these unsafe users suggest that they had lost control to the drug, and by placing distance between unsafe users and themselves, participants were demonstrating that they were still in control. Though they needed to inject drugs, they could be "clean about it." They had a "gross habit," but they were not "gross."

"Knowing Your Limits"

One participant said that the amount of drug used also contributed to safer use.

This participant had been affected by a recent overdose and, for him, on top of using cleaner an additional meaning of safer use was "knowing your limits I guess, like tolerance. Like knowing how much you can inject without overdosing, for example."

Being conscious of the amount of drug consumed was safer use as it protected him from overdosing again – it gave him control over the effect the drug would have.

The Importance of Safer Use: "It Prevents Ya from Dyin"

For many youth, safer or clean use was important because it prevented blood borne illnesses and even death. Many participants were very aware of the dangers associated with injection drug use, in particular HIV and HCV, and were also aware of their elevated risk of death due to use of injection drugs. Safer use was important as it could prevent them from getting diseases and from dying:

Why is [safer use] important? Because it prevents ya from gettin' diseases. It prevents ya from dyin'. It saves your life.

Safer use gave participants control over their life. Despite the power that the drug had, if they could use safer, participants could help make sure they stayed disease-free and alive.

Additionally, safer use was important to several participants because it would help to protect those around them from the risks associated with their drug use. Several participants noted that they "would never wanna be the reason that someone caught something" and were conscious of using safer to protect their friends and family:

I wouldn't want to contract something and give it to somebody that I love. That's the only reason. I really don't care about myself much, but it's more or less me tryn' ta protect the ones I love from anything I could give to them.

For these participants, safer use was about more than self-protection; safer use protected their friends and loved ones too. Safer use allowed these participants to prevent themselves from getting blood borne illnesses, and it also allowed them to prevent those around them from getting blood borne illnesses because of them. Safer use was important as it allowed participants' to control the impact that their drug use would have on their own health and on the health of those closest to them.

Preventing Transmission

Understanding what is safer use and less safe use may impact how participants practice injection. As one participant said, "as far as I know, I don't know anything I could be doing to be safer." Participants could only control what they knew to control; thus understanding how blood borne illnesses could be transmitted through injection practices could contribute to safer use.

Some participants spoke of the importance of knowing about the transmission of blood borne illnesses. They said that there were multiple "types" of these illnesses and they could be transmitted through using other people's dirty paraphernalia:

You do gotta be aware like, ah basically any instrument that someone else has used, any part of their instrument that they have used, that's all dangerous use.

Other participants were less sure about how blood-borne illnesses were transmitted and felt less clear about whether of using dirty paraphernalia was safer or unsafe:

And like I don't know a whole lot about it -I don't know if you can catch HIV from just using like a dirty dish or something, I don't know if it has to be the needle, so maybe just getting the information out there about how it is transferred, that would be helpful.

According to one participant, "you need to know, even the small things like that they're good to know. Cause you can make more informed decisions." Knowing, for example, that "the only thing that kills Hep C is an autoclave sterilizer" was important to be able to determine whether it was, or was not, safe to share. Thus, some participants felt that having good information, particularly around the transmission of blood borne illnesses, gave them the power to make decisions to be clean.

Subtheme Three: Increasing Control by Increasing Access to Services and Knowledge about How to Practice Safer Use

Participants spoke of ways in which access to clean supplies and opportunities to learn about safer use could be increased. They also provided suggestions for additional harm reduction services that would be beneficial towards increasing the control they had over practicing safer use and mitigating the power of the drug.

Increasing Access to Community Resources

When asked about ways in which community resources and supports for YWID could be improved, participants expressed a desire for greater information about and linkages to services in the community: "I'd like to know more, like if I could find more

resources that would be good." One participant, for example, suggested that a service similar to Mobile Crisis Mental Health be created specifically to help facilitate linkages to services among people who use drugs:

There should be like a mobile drug addictions counseling unit. Go around and actually get the active junkies on the street and tell them you can get tested here, you can get your cleans here, you need a place to stay? You can go to this place, this shelter's pretty good.

Participants wanted to know what was available for them in the community. The wanted to know what resources were available to help facilitate safer use and deal with daily life (e.g., shelter), thus they wanted to know more about how to control their drug practices and exercise control over the power of the drug. More linkages to and between services may be necessary as youth wanted to know what options were available.

Participants discussed how their drug-using peers were an important source of information about services. A couple of participants mentioned that other PWID had told them about the NEP. For one participant, finding this service had drastically improved the safety of her use:

- P-[...] she [drug-using peer] took me there [to the NEP] um, the next day and showed it to me because she was like 'you need to get your own pipe, you need to get your own needles,' and I was like 'okay,' and she took me to get them.
- I What were you using before? Where were you getting...
- P-I would just borrow needles from people and use their pipes.

Thus YWID themselves may also be able to increase awareness of services available in the community. Having a greater awareness of available services, and especially organizations supporting harm reduction, could facilitate access to clean supplies, as it had for the above participant, and thus allow participants greater control over their injection practices.

Learning about Safer Use

Education about safer practices was important to participants. Several participants wanted to know more about safer use and about blood borne illness transmission. Furthermore, some participants indicated that they did not think some PWID in the community had all the information they needed in order to be safer:

P-You need to have your own supplies, you need to have your own equipment, you need to have your own drugs. That's basically the biggest thing I need, I would like people to understand. [...]

I-Do you think that people do know that, understand that and know that? P-No.

Participants identified several sources of information from which they had learned about safer injecting practices. Some had learned about safer use from the needle exchange program or other community resource (e.g., the methadone clinic or a shelter). Some participants had learned about safer use from workshops (e.g., a workshop about HCV), from the internet (e.g., Google), and/or from reading materials (e.g., brochures about safer injection) available at the NEP, the methadone clinic, and youth drop-in centres. All these sources of information could potentially increase the control participants had over safer use by providing information about how to use safer.

Drug using peers were also noted as an important source of information about safer use. Some participants had learned how to inject from peers. One participant felt that another user had taught her how to better hit her veins:

I-And you said that you had a friend who taught you some stuff, what did the friend teach you?

P-Oh just like, when you're injecting you have to pull the plunger back a little bit to know if you've hit a vein and the blood will rush into the needles. I didn't know anything about that before so that was new to me.

Peers may not always be accurate, though. One participant described being taught how to inject by a boyfriend who she believed actually taught her wrong:

When I first started shootin' up I learned from my ex-boyfriend, and, wow, [the needle exchange program] taught me a lot differently. [...] And I think, they woulda, they saved my life a little bit, because I woulda ended up with something, or I woulda ended up hurting myself because I didn't know how to do it properly.

Another way drug-using peers could influence understanding, and use, of safer practices was by acting as "crusaders." One participant described the presence of "crusaders" within her network, or people who were "really safe. Like obscenely safe." This participant said that when there were people in a group really pushing safer practices, it "catches on":

I see them doing it and I'm like 'Yeah, yeah!' you know, so it's like domino effect kind of thing. You get a couple crusaders out there and it catches on.

Thus, just as peers can facilitate access to clean needles through secondary distribution and increase awareness about services for YWID, they can also facilitate, or encourage, use of safer practices. Having more information about how to use safer gave participants a greater ability to control the safety of their use.

Improving Access, Providing Education

Participants were asked to share their ideas about how current resources might be improved or about new resources that might be needed. Several participants mentioned that having a needle exchange program that was accessible 24-hours a day and/or having more needle exchange sites throughout the city would be beneficial:

Maybe have like a 24-hour like distribution, like [needle exchange program] thing, that would be ideal.

I just think [the needle exchange program] should be open more. Or they should have more places like it that are open at different times of day because [...] when

their doors are closed it's like 'oh God what do I do,' you have to either hope for the van to come around with clean needles and supplies or you're screwed.

Having more sites would reduce the barrier caused by location of services, and having a 24-hour service would reduce the barrier caused by time of day. More sites and increased hours would improve access to clean needles and thereby facilitate control over safer use. Additionally, a couple participants mentioned that access could be improved if other places (i.e., organizations other than the NEP) were willing, or more willing, to distribute needles:

[...] like there's plenty of places to get needles, but like they don't like hand them out really [...] they should have them in more places. I don't see why they don't just keep a stock pile of them, and like when people ask for one they give it.

Thus, participants noted the potential of getting other organizations involved in the distribution of clean supplies as well.

Of note, while several participants expressed a desire for improved access to a needle exchange program, this was not expressed as a criticism of the current NEP. As discussed, the NEP had the fewest barriers and was these youths' preferred source of clean supplies. The NEP afforded participants the greatest opportunity to control the safety of their injection practices. All participants spoke very highly of the current NEP. A 24-hour service with multiple locations was a suggested next step.

In terms of increasing knowledge, a couple participants mentioned that the NEP could offer classes at different locations, for example at shelters, and teach YWID how to use properly. Some participants suggested that pamphlets on safer use could be readily available in more locations as well.

Participants also talked about the need for a supervised injection facility (SIF) in Halifax. The need for a SIF came up spontaneously in several interviews and was probed

in several more. Participants said that having a facility that was "more than just needles, here's your needles and go" would be "fuckin' amazing," "help a lot of people," and "make it easier." Furthermore, a dedicated site would help to provide a sense of space to PWID without a home location in which to use:

I think in Halifax we need to find a safe [supervised] injection site. See, cause like now there's so many people that are upset with people that are using in public bathrooms [...] So I think if we had a safe [supervised] injection site, a place where you could actually go to take your drugs out, not be penalized for having whatever you have on you, and basically use, then you could have your disposal units there, you could have your, pick up your supplies there, I think they should have some type of site like that.

A SIF, in addition to facilitating access to clean needles and other injection-related paraphernalia, would improve YWID's ability to be clean in their use and provide a safe place to use for YWID who currently lacked a secure location. One participant also noted that a SIF would not only benefit YWID, but would also keep the community safer and cleaner as well:

[...] not just for the people who are doing [drugs] and the dangers that go along with them doing it outside, but also people who walk around these streets and step on a dirty needle, or kids find a dirty needle outside cause unfortunately, I always did, but a lot people discard their needles wherever [...] if they have a safe [supervised] injection site, the needles don't leave the site, they're there, they have needles there, and they have people to make sure you don't overdose and whatever, I just think it's a better idea.

Furthermore, a SIF was noted as being a good potential site from which to increase knowledge of safer practices among PWID and offer assistance with injection-related problems:

That would be a really good idea, to have a clinic that educates [people who use drugs] and you know shows them. [...] they're gonna learn from it. I think that'd be really good. And people could go if they had something wrong, like I did, and there would be someone to talk to.

Thus a SIF has the potential to increase the availability of clean supplies; provide a safe, clean, place to use; keep the larger community clean from discarded needles; and increase knowledge of safer practices, thereby promoting cleaner, safer use. A supervised injection facility has the potential to help participants surmount many of the challenges they face in controlling their injection practices. A SIF may thus increase the control YWID have over practicing safer use and lessen the impact of the power of the drug.

Theme Two: Gaining Power Over Drugs

Several participants seemed to express some regrets over their drug use and the way their use had impacted many aspects of their lives. Many participants had an awareness of the power that their drug use had over them, and how difficult it was to move forward from drug use and regain control over their lives. Some participants expressed a desire to be able to go back to a time before they had begun injecting and erase that part of their lives:

So just knowing that that high exists now haunts you for the rest of your life. So basically if you haven't tried it, don't try it once. Because once you've tried it once, you're screwed for life.

I wish I could press control-alt-delete and just start off as a new person, but I can't you know. I have all these memories and stuff of past use that I can't get out of my head.

All youth interviewed had used injection drugs within the past 30 days; however, the majority of participants had a recent experience with trying to cease or reduce their use of opioids, and seven were reportedly currently on methadone (note – "on methadone" refers to methadone maintenance treatment (MMT); opioids refer to illicit

opioids or licit opioids used in ways other than medically directed and does not include methadone from MMT).

The notion of "getting clean" came up spontaneously in almost every interview and was less about controlling the impact of the drug and more about controlling the drug itself. "Getting clean" held different meanings for different participants. Some participants defined "getting clean" as reducing the amount of drugs or frequency with which they were injecting. Others were testing out brief periods of abstinence from other drugs while on methadone – these participants had had brief periods of being "clean" intermixed with periods of relapsing to injection drug use. Some participants were actively trying to eliminate use of all drugs (excluding methodone) completely. One participant was trying to move his use to a less hazardous form – switching from injecting opioids to snorting opioids or using marijuana rather than opioids. "Getting clean" could thus be viewed as a continuum, moving from a reduction in opioid use and/or frequency of injection to a complete elimination of all drugs (excluding methadone). Different participants had different goals for "getting clean" along this continuum, but in all cases, "getting clean" could be seen as an effort to gain some control over their lives; to gain some power over the drugs.

Methadone

All participants on methadone described the experience of being on methadone in very positive terms, for example:

Thank fuck for methadone;

It's easier, methadone makes it easier. [...] it's like a blanket, like you know. It's a lot easier:

[The methadone maintenance program] has turned my life around;

Well methadone saved my life. [...] it's like being on vacation, pretty much, yeah;

Methadone basically saves a junkie. It does work. The program is amazing.

These participants generally felt that being on methadone gave them the opportunity to sort out their lives and get "back on track":

Methadone saved my life. I got on it a couple months ago. And now I'm getting my life back on track. I got an apartment now, an' I'm back to school in January.

Methadone "saved" participants by allowing them to gain power over their drug use and focus on other things. Methadone afforded them the opportunity to care about school, housing, family and family responsibilities – it allowed them to care about more than just drugs.

For some participants, getting on methadone had been the catalyst to them attempting to get clean. These participants had not been trying to "get clean" before methadone, but instead had been waiting to get into the program:

I wasn't really tryna get clean. I was waiting till I got on methadone to like try, you know?

For a long time I really didn't do anything, I didn't really try to change, I just said I would, and didn't. It wasn't until I actually got, I don't even think I would have wanted to get clean like actually until they accepted me to the methadone program.

From their descriptions of being on methadone, methadone seemed to address the physical side of their drug use (e.g., their physical dependence on opioids) and made injecting opioids redundant. Being on methadone reduced the power that other opioids held and took away participants' need, and desire, to use them:

Before it was kind of, drugs first, then my life came afterwards, so. I'm glad that I don't have to be like that anymore. I have more coping skills, yeah. I'm not craving and wanting it all the time.

Um, well I've been on methadone for like a month and a half, and I'm on a dose now where if I take my methadone I can't feel a pill, really. I, I get a little tingle, but I can't [...] it's just like, what was that? I just spent 20 dollars on that? [...] So it just become ridiculous to use, it's pointless. Which is the benefit of methadone, right?

Thus, getting on methadone, for these participants, was a necessary first step that allowed them to address their physical dependence on opioids and start to think about "getting clean."

Other participants took a more active role in "getting clean" before getting on methadone and had aggressively pursued entry into MMT to reduce their use of opioids:

I was very persistent. Very persistent. I [had] had enough.

I went everyday to [the methadone program] to asking them if there were any spots open, if there was anybody that moved out of the city, if there was any, basically you know way of getting in quicker [...] I pleaded my case [...] about how heavy my usage was and how I really need to get onto this program [...] I really wanted it.

These participants also noted that methadone addressed the physical dependence and made injecting opioids redundant and that the real work of eliminating drug use came after getting on methadone. However, they seemed to have found a catalyst to attempting to get clean or reduce their usage before getting on methadone, and had then actively sought help from the methadone program to do this.

A couple participants felt that methadone was not a form of treatment they would pursue. One felt that her usage was not severe enough to warrant being in MMT, and she "wouldn't want to take someone's spot." Another felt that methadone substituted one drug for another and MMT was not a form of treatment he was interested in: "like people have suggested that I get on methadone, and I'm like that's just replacement therapy, you just get addicted to the methadone. Like it's, it's redundant." While both of these

participants had recent experiences with trying to reduce their use of opioids, they were doing so without the help of methadone. Methadone was not for everyone.

Participants on methadone acknowledged the work involved in being in MMT and trying to stay clean. Several spoke of the time and effort it had taken them to get into the program and how it also took time to feel the full effects of the program:

So when you first start they have to put you on a small dose [...] But once I get up to [a higher dose], I'm going to be totally fine, I'm going to never need to do a pill, and I'm going to be able to go throughout my whole entire day and not have a problem.

One participant noted that long-term MMT was preferable to the methadone given while in detox to manage withdrawal, because long-term MMT gave an individual the opportunity to sort out his or her life while not having to worry about drug cravings:

The problem with [withdrawal management] is it's like a short time, so once you get out you have the temptation to use again and you're only going to be on methadone for another few days [...] the methadone maintenance programs, are more helpful to me because it's, because you're on methadone for a longer time, and it gives you the time to not worry about having to go and get drugs and you don't have to worry about being sick and you can work on getting your life back together.

However another participant mentioned that even though she was on methadone and was working to eliminate drug use, she was still susceptible to lapses:

I still have days that I think 'oh why don't I just take off for a day and go get high,' and I don't, it's just the way our brains are going to think, I guess.

Thus, participants were aware that stabilization on methadone took time, and that even while on methadone, lapses were still possible. Gaining power over the drugs was not a quick process. Participants also noted that the long-term nature of the methadone maintenance program was helpful as it provided the time to get "your life back together."

There were also some participants who seemed to hold very high expectations of methadone, such as the participant quoted above who believed that once he got to a high enough dose, he would "be totally fine [...] never need to do a pill, [...] be able to go throughout my whole entire day and not have a problem." So while there was an acknowledgement of the process involved in "getting clean" on methadone, there also seemed to be some expectations attached to methadone, such as the idea that getting stabilized on methadone would fix everything. For many participants, methadone was seen as the way they would gain power over drugs.

Additionally, different participants had different goals in the program, just like they held different goals for "getting clean." Some were happy that methadone had allowed them to reduce the frequency with which they were injecting. Some were attempting to begin the process of eliminating injecting. Others still were trying to cut all drugs out completely and use only methadone as they moved out of the drug-using world (e.g., into stable housing, back to school). So while methadone was helping participants to get "their lives back on track" and gain power over the drugs, what having power and being "back on track" meant was different to different participants.

Challenges to Getting Clean

Many participants spoke of some of the challenges they faced while trying to "get clean", including avoiding drug-using peers and avoiding certain geographic locations in the city. Several participants mentioned that it had been necessary for them to "cut ties" with drug-using peers. For one participant, "cutting ties" meant she had "cut out" all peers who used injection drugs, with the exception of a few injection drug-using peers who played a significant role in her life. This participant had no family support, so these

peers seemed to act as her surrogate family. Additionally, she mentioned trying to hang out more with her "weed-smoking" friends, so she did not see "cutting ties" with drugusing peers to mean cutting ties with all peers who used drugs, but only with those peers who used 'hard' drugs.

For other participants who described "cutting ties" however, this meant eliminating associations with all peers who used drugs. This could be "wicked hard" as one participant mentioned, "because that's the only people you know." These participants also noted that it was difficult to re-establish or form new relationships with people who did not use drugs. One participant mentioned that he had no way of meeting non-drug users – that "hustling" on the street was done by people who used drugs, not people who did not use drugs: "straight people don't really associate with strangers on the streets.

Usually it's drug addicts that will talk to anybody on the streets." Another participant mentioned that most of her family wanted nothing to do with her even now that she was "getting clean," as they only knew her as a drug user: "I was so young when I started, that's all they've known." Thus, not only was it difficult, and in one case perhaps unrealistic, to "cut ties" with peers who used drugs, it was also difficult to establish relationships with people who did not use drugs. The youth moving away from peers who used drugs may have had no one else to move towards.

Several participants also spoke of trying to avoid a particular geographic area in Halifax in which many people who use drugs congregate. This was difficult as this is also the area in which many services for PWID, YWID, people who are homeless, and youth who are marginalized are located. This was the area in which the methadone clinic

was located, as well as the needle exchange program and a popular youth drop-in centre, so for many this area was nearly impossible to completely avoid:

 $P-[geographic\ location]$ is like junkie central to me...I don't even have to see it being done in front of me, I just have to see the people. Cause you can kind of tell who is and who isn't [...] and that's a trigger on itself. [...]

I-Is it easy to avoid this area?

P-No, because [organization] is here, and I love [organization]. What else is here; [various services and supports] are here, apartments are cheaper in this area, and it's just like uh, you can't get away from it.

Some participants also mentioned that is was difficult to live in a shelter or need shelter when trying to get clean as the local shelters are frequented by people who use drugs. No options for sober living within the shelter system were perceived by these participants: "most of the shelters that deal with street people, they can't have it no drug use, do you know what I mean, because everyone there's a drug addict." In these discussions, participants were acknowledging an inherent complexity in attempting to "get clean": while participants needed the services in this particular geographic area and many needed to access the shelter system, accessing these places could be "triggering" or hamper efforts to "get clean" as it put them in contact with drug use and people who use drugs.

Regaining Control

Several participants spoke of being at a stage in their recovery where they were moving past the physical dependence on opioids and were now being faced with the emotions behind their drug use. Many participants had been using drugs for many years, and drug use was a significant part of their lives. Further, several participants had been using drugs as a coping mechanism, and now that they were in the process of eliminating

use, they were forced to deal with negative emotions they had been masking and find new ways of coping:

It gets harder when, once you're not using as much anymore and you're past the physical withdrawal stuff, you're getting hit with the emotional things that you never really dealt with because you were masking them with the drug use.

And I think that if I deal with what's going on inside, I can fix my addiction, cause I think the only reason I'm in addiction is because something's not right inside. And if I can fix that, I think I'll be good.

Participants mentioned several ideas and resources that they felt facilitated "getting clean" and the idea of "facing your past" and getting out of the routine of drug use, including support from peers, support from formal programs and counseling services, and attending community-based programs.

Peer support. Several participants felt that peer support was helpful towards getting clean. Some participants said that hearing the stories of people who had gotten clean was beneficial – hearing that "getting clean" was possible from others who were getting or had gotten clean was inspirational. Some heard these stories at Narcotics Anonymous (NA) meetings, and others knew current service providers who were former users. These participants felt that these stories were helpful as it showed them that gaining power over drugs was possible: "it gives you hope, you know. It just shows you that you can actually do something after this." Additionally, some participants felt that it was helpful to have a sponsor. The idea of a sponsor was described as a friend who could act as a support to encourage continued abstinence from opioids and/or be available when the individual felt like using and/or act as a physical buffer when the individual was visiting geographic areas that could be triggering:

Around a week, a week and a half [of being clean] [...] I was like 'fuck this, just give me a fuckin' pill,' and [my friends] were like 'No, what? Saturday's two weeks [clean]!'

I think the important thing is, is get a sponsor. Because, just have a friend that you could call [...] and say 'look I need some help right now, I'm really, really craving this, can I come over and just maybe have a coffee with you and get this off my mind?'

Right now I'm in recovery I like to be with somebody else a lot when I go out. Just because I don't feel safe and I know I can't trust myself 100 percent.

Thus, a sponsor was seen as helpful both by offering encouragement towards continued progress and supporting avoidance of drug use by offering a distraction or physical buffer.

Formal support. A few participants also mentioned that using formal support programs or having a counselor was helpful. Some used meetings (e.g., NA) and/or day detox to help with getting clean or as a refresher when they felt themselves "going sour again:"

I'm doing 90 meetings in 90 days. I did a meeting last night and the night before, those are the two nights that I've spent out since I got outa detox [...] that's pretty much all I'm trying to do is just go to meetings.

I'm trying to get into day detox again, I'm trying to, as soon as I did use that's the first thing I did – no this is wrong, get me into something, my brain's going sour again.

Some participants also felt that they needed therapy or a formal counselor (i.e., not a peer or sponsor) to help them work out issues. Thus, in addition to more informal peer supports, some participants also felt they needed the assistance of formal supports or counseling.

Community programs. Several participants also felt that community programs were useful towards "getting clean" and developing coping mechanisms. For some, these

programs included NA and similar resources, while others were referring more to leisuretype activities. A couple participants mentioned that their lives were "pretty boring," and for one participant, being bored was an occasion to use:

Most of the time when I do decide to use is when I get bored, and it's just like there's nothing to do and I get bored and depressed and I just use, and then I'm high and I don't care anymore, and it's, feel better about myself momentarily.

Thus, having programs and activities available to attend was a good way to fill the day and allow people who use drugs to see "what life is really like." Programming could thus be seen as providing an alternative to drug use while "getting clean."

It is also important to note that different participants spoke of support in different ways. The same support could be used by different participants in different ways – for example, NA was used by one participant as a source of inspiration through hearing the stories of other users, by another participant as a constant reminder to not use by attending meetings regularly, and was suggested by another participant as a way to fill time. Furthermore, different participants needed different levels of support. While one participant was happy leaning on her peers, another felt that she needed formal counseling to help her eliminate drug use. Thus not only did participants have different goals for "getting clean," they also had different ideas about how to get clean. Gaining power over drug use looked different to different people.

Waitlists

A significant barrier to "getting clean" was the, often long, waitlists to get into detox, MMT, and other community resources (e.g., sober living). Many participants felt that the waitlists were categorically unfair and needed to be addressed:

I think that they should do something about the waitlists that are there to get into, even to get into withdrawal management, I had to wait like almost 2 months to get into that before.

There's all kinds of great [community resources] there really is, but I think there needs to be more. Because there's waiting lists at every single place, there's people that are trying getting rejected that really need the help.

Being able to go into the methadone program, I think there's a [long] waiting list. I mean, it should be a lot easier for junkies to be able to access methadone, not make it soooo impossible.

A couple participants described the waitlists as a resource allocation issue and felt that the community as a whole needed to place more value on helping PWID:

More services. More. They need more. There's waitlists now. They shouldn't have a waitlist. [...] We could really change around the numbers if there was more services. Like instead of making cuts, do you know what I mean, cause constantly they are looking to trim the fat, trim the fat, trim the fat, but this is a problem that's getting worse and worse and worse, it's not getting better, it's not. [...] They need to address the problem.

Many participants had experienced having to wait to access services, and for some this had had a very negative impact on their lives. The issue of waitlists was a very real issue that was brought up often when I asked about how services could be improved. The frustration of many participants at having to wait for services, and even at having to see other people wait for services, was apparent. Waiting for services seemed to take power away from participants. Accessing treatment services was often the first step in the process of "getting clean" and was a way for participants to exercise agency and take control of the drug. Being told to wait takes away agency – it took the control over getting clean out of the hands of these youth and put it into the hands of the services.

Furthermore, as many participants had waited *until* they got onto methadone or into detox before beginning to think about "getting clean," waitlists for services could be

a serious barrier to beginning this process. As several participants noted, the time spent waiting for services could be very costly:

I mean in a year, people can die, people can contract diseases, people can, like anything can happen in a year. I mean I think that's absolutely ridiculous to have to wait so long to be able to get on, to get some help for your addiction problem.

I called everyday for almost 2 months. And in that time, the first, first 3 weeks I told everybody [...] I told my family, and everyone originally was, you know, happy. But as time progressed and I still hadn't went, then the happiness turned into disappointment, then it turned into resentment, maybe I really wasn't trying to get in, and then the last 2 weeks before I got into detox, that's when I lost [...] I lost everything within 2 weeks. Had I been able to get into detox in the first months that I was trying [...] I'd still have like all these things that meant so much to me.

Thus, while methadone or detox could help to give participants power over their drug use, waiting for services could be disempowering – it took away opportunities and even had the potential to be life-threatening.

Despite the power drugs had over participants and the barriers they faced to "getting clean," these youth held hope for a time when they would have control over the drugs. The youth who participated in this study, while having complex histories of drug use, also had hopes for the future and for "getting clean" from drugs:

I'm not a dumb person...I'm intelligent...I want to work towards getting an education...I wanna go somewhere in life.

Notwithstanding the significant power that the drug had, I wish to acknowledge that participants still had agency, which they demonstrated both by taking steps to control the safety of their use and endeavouring to gain power over drugs. Drug use may complicate almost every facet of their lives, but being a "junkie" is not all that these youth are:

I feel that when your entire life is judged by a single thing, it changes the shape and the timeline of your life. I'll always be the junkie. And that's not who I am.

Chapter 5: Discussion

"The choices individuals make are always to some extent constrained by wider structural forces and the broader social contexts that they inhabit."

(Joanne Neale, 2008, p. 432)

Summary of Results

The key purpose of this study was to explore youth's understandings and practices of safer and/or unsafe injection drug use, and the key social factors influencing these understandings and practices. Focus was also placed on youth's experiences accessing clean needles and other injection-related paraphernalia and harm reduction supports at community-based organizations and through other venues.

Participants understood safer use to mean "clean" use. Clean use comprised of using clean supplies, in particular clean needles, having a clean bodily site of injection, and using in a clean environment. Participants understood that safer use was important in the prevention of blood borne illnesses and death. Being clean users helped participants control how safe their injection practices were, and separated them from other PWID who were less auspicious.

Participants accessed clean needles and other clean supplies through the NEP primarily, though clean needles could also be purchased from pharmacies or obtained from peers. Participants would also keep their own needles to re-use to ensure they always had needles available and would not need to share. Having needles available helped participants control the safety of their use.

Barriers to accessing clean needles could create barriers to safer use. These barriers included the hours and location of the NEP and pharmacies, the cost of needles at the pharmacy, and needing to inject (i.e., being in withdrawal) but not having needles available. The location of use could also sometimes create a barrier to safer use, in that some participants frequently used in less safe locations, such as public washrooms or outside. Barriers to safer use lessened the control participants had over injection practices

The stories of participants revealed that drugs, and specifically the use of injection drugs, had a great deal of power over their lives. For some, drugs were the primary concern above all else. However, many participants also discussed their experiences with trying to "get clean" or gain power over their drug use. "Getting clean" held different meanings to different participants, from reducing the frequency of use to eliminating all drug use (excluding methadone). However, in all cases "getting clean" appeared to be an effort to gain some power over drug use. Participants talked about facilitators to "getting clean," including the methadone maintenance program (MMT), as well as barriers to getting clean, such as ties to drug-using peers. Several participants also shared their hopes for the future and for a time when they would have more power over their drug use and more control over their lives.

Discussion

Participants' stories point to the ways in which they navigated gaining some control over their drug using practices and also to the ways in which they were attempting to gain some power over their drug use itself. Barriers to having control over

safer use and gaining power over drugs can create risks to the health of these youth. It is important to understand the context that leads to differing degrees of risk in order to impact the factors causing these risks (Link & Phelan, 1995). The discussion that follows will explore the barriers, and facilitators, youth faced to managing risk, or taking control of their drug use, and what these results mean in terms of implications for health promotion policy and practice as well as future research.

Safer and/or Unsafe

Before discussing how youth in this study understood and practiced safer and/or unsafe injection drug use, I would like to comment on the term "safer and/or unsafe." This is a common conceptualization used in literature to discuss the injecting practices of PWID (see, for example: Fast et al., 2010a; Jackson et al., 2002, 2009; Ross et al., 1994; Stoltz et al., 2007a; Wood et al., 2001), and thus was also used in this study. However, as I moved through the process of conducting, reading, and analyzing the interviews, it became apparent that the injection practices of these youth do not fall neatly into the categories of 'safer' and/or 'unsafe.' Rather, there is a good deal of grey area, or middle ground, in which practices may be more or less safe, or carry more or less risk. Re-use, for example, is often described in literature as an unsafe practice (see, for example: Bailey et al., 2003; Kipke et al., 1996; Sirikantraporn, Mateu-Gelabert, Friedman, Sandoval & Torruella, 2012; Wood et al., 2001). The youth in this study, however, reused needles as a way to prevent sharing; thus re-use was seen as safer than sharing; at the same time, many participants also noted the downfalls associated with re-use (e.g., infection, pain), thus re-use was also not seen as entirely 'safer' either.

What constitutes safer and/or unsafe injection practices is not static but changes by person, situation, and experience. As Maycock (2005) notes, young people hold different views and beliefs about drug risk which are devised from experiences with "new drugs, novel use setting, and emergent events, as well as changing perceptions of safety and harm" (p. 362). Furthermore, as Rhodes (1997) notes, risk behaviour is produced by complex interactions between the individual and the environment. How youth practice and understand safer and/or unsafe injection drug use should thus be seen as more of a continuum rather than a binary concept, moving from safer to less safe and being shaped by the individual, his or her experiences, and the environment in which use occurs.

Understanding Safer Use: Being "Clean Junkies"

For participants, safer use meant clean use, which encompassed using clean needles and other injection-related paraphernalia; keeping the bodily site of injection clean; as well as using in a clean environment and leaving the environment clean after injecting. By taking steps to be 'clean' users, participants gained some control over their drug use and distanced themselves from other 'dirty' PWID who did not have clean injection practices and were not in control of their drug use.

The separation of the good/clean self from the other bad/dirty PWID reported by participants in this study has also been reported in other literature. In Sheard and Tompkins' (2008) study of female PWID, for example, participants emphasized their use of clean needles and perceived PWID who used other people's dirty needles as "abhorrent" (Sheard & Tompkins, 2008, p. 1543). In Fraser's (2004) study of HCV prevention among PWID, participants demonstrated a high level of awareness of the importance of hygiene and of the work involved in ensuring cleanliness in the injection

process. Furthermore, participants discussed, with a "censorious moral tone," the unsafe practices of others (p. 210), not unlike the youth in the present study. Some of Fraser's participants reported avoiding injecting around unsafe users to minimize the risks to themselves, similar to the youth in this study who spoke of avoiding certain locations deemed unsafe. Furthermore, PWID in Fraser's study also expressed disapproval of other PWID who improperly disposed of used needles, noting that this practice was disrespectful. In Hughes (1999) study of PWID, perceptions of who was "clean" were tied to perceptions of who was free from HIV. "Clean" users were those who were "clean" from disease and not engaging in practices that would put them at risk. Sharing with clean people was seen as somewhat acceptable. On the other hand, people who had questionable, or unsafe, injection practices were perceive as risking HIV and were thus dirty and unsafe to share with (Hughes, 1999). Participants in Hughes' study rarely attached a 'dirty' label to themselves, and also perceived family and close friends to be 'clean,' not unlike participants in this study who stressed that the people with whom they used were "obscenely safe." Thus YWID in this study and PWID in several other studies report taking care with their injection practices and place distance between themselves and others who do not take this care. As Rhodes and colleagues (2007) remark: "the 'responsible' injector has a sense of citizenship or 'respect' and [...] takes care of his or her environment and equipment" (p. 578).

Participants at times also contradicted their notions of themselves as clean, for example by noting the use of their own dirty needles, or occasions on which they had shared, or times when they had needed to make-shift supplies with what was available.

Unsafe practices were frequently undertaken out of need – needing to alleviate

withdrawal and/or needing but not having the proper supplies. Unsafe practices occurred where the drugs had power. Thus while youth stressed the cleanliness of their practices and clearly cared about being safe, responsible injectors, sometimes they found themselves in environments that appeared to make safer practices more difficult, and thus participants lost some of their control to the power of the drug.

Despite these contradictions, participants maintained that they were clean users; nevertheless, their descriptions of dirty PWID suggest that participants do hold the view that injection drug use is a dirty practice. Goffman (1963) notes that individuals who are stigmatized, in this case PWID, may hold the same belief about the stigmatized condition as the general public; however, youth in this study seemed to project this identity onto other PWID while highlighting the behaviours that distinguished them from being dirty. Participants were not unaware of the power that the drug held over many of them or of the risks associated with injection drug use. By enacting a dichotomy whereby they had control over safer practices that other PWID did not, participants may have been attempting to recapture some of the power they had lost to the drug. The drug may be powerful, but as clean users they were not powerless: they could still control the cleanliness of their practices. Simmonds and Coomber (2009) note that participants derived a sense of self-esteem from being able to distance themselves from 'lesser' PWID. Bandura (1990) notes that to successfully perform a behaviour, which in this case would be safer injection practices, an individual must have belief in their own capacity to control that behaviour. While YWID may sometimes practice behaviours that contradict their own notions of what is 'safer,' a general sense of oneself as being 'safer' may contribute to a sense of control and a feeling that one is capable of being safer. Thus

despite contradictions that would indicate participants do occasionally use unsafe practices, a general feeling that one is a 'clean' user may allow these youth to feel like they do have some power and can control the safety of their drug using practices.

Understanding how to practice safer use. While most participants seemed to understand safer practices, some mentioned what they perceived to be a lack of knowledge within the community of PWID with regards to how to practice safer use and how blood borne illnesses are transmitted. One participant herself admitted to not knowing a lot about how HIV is transmitted or the risks of sharing paraphernalia. Participants discussed the importance of understanding all aspects of safer use and blood borne illness transmission so they could "make more informed decisions." Thus the youth in this study wanted to have a good understanding of safer practices: they wanted the power that comes with knowledge – in this case knowing how to control their injection practices.

Rhodes (2002, 2009) notes that harm reduction initiatives have been criticized for focusing too heavily on individual behaviour and neglecting the broader social context in which risk is produced. Rhodes argues for an approach to harm reduction that shifts the focus for change away from the individual alone to the social structures in which individuals find themselves (Rhodes, 2002, 2009; Rhodes et al., 2005). While it is undoubtedly true that the environment of these youth shaped their behaviour and at times constrained the amount of control they had to practice safer use, it is nevertheless still important that youth understand how blood borne illnesses are transmitted and how to practice safer use. Research by Jackson and colleagues (2002) indicated that PWID in Nova Scotia had a good understanding of the risks of sharing needles, but there may have

been less awareness of the risks associated with paraphernalia sharing, which echoes the perceptions of some youth in this study that PWID in the community may be unaware of the risks of sharing paraphernalia. Thus, while working to improve the context that leads to risk and enable participants to gain control over their safer and/or unsafe practices, we must also continue to provide YWID with the information they need to enact safer use practices.

Practicing Safer Use: Accessing Clean Supplies

Participants in this study reported that their primary source of access to clean needles was a needle exchange program, because the NEP had what they needed (e.g., needles, cookers, filters, water) and because the NEP had a positive social environment. Jackson and colleagues (2009) in their research with adult PWID in Nova Scotia found that many were comfortable accessing NEPs. Likewise, in a study of the meanings of NEPs to NEP users in British Colombia, MacNeil and Pauly (2011) found that NEPs represent a "safe haven" for PWID in which they did not experience the judgment often encountered when accessing other services (p. 29). Marlatt (1996) notes that harm reduction services offer a gateway to anyone willing to "come as they are" (p. 788). By accepting YWID as they are and allowing them to gain access to all needed clean supplies, the NEP afforded participants access to the resources to take control of their safer practices. Experiences with the NEP may thus be empowering to YWID.

Jackson and colleagues (2009) note that some of the PWID they spoke to would use pharmacies only as a "last resort" (p. 7). The youth in this study did not indicate that pharmacies were a last resort, but that they were the second choice if the NEP was not available. However, several youth did indicate that experiences with pharmacies were

uncomfortable, and many concealed their identities as PWID (e.g., pretending to be diabetic) in order to avoid telling pharmacy staff they wanted needles for drug use. The strategy of hiding one's identity as a PWID when purchasing needles at a pharmacy has been reported elsewhere (Davidson, Lozada, Rosen, Macias, Gallardo & Pollini, 2012; Parker, Jackson, Dykeman, Gahagan & Karabanow, 2012; Reich et al., 2002). Thus, while pharmacies may be the second choice, PWID also seem to feel stigmatized accessing needles at pharmacies.

A couple of youth in this study noted negative experiences when trying to access clean needles from a hospital. Negative experiences in healthcare settings among PWID and street youth have been reported by many researchers (Drumm, McBride, Metsch, Page, Dickerson & Jones, 2003; Jackson et al., 2009; Karabanow et al., 2007; Paterson, Hirsch & Andres, 2013). In Karabanow and colleagues' (2007) study exploring the health status of street youth in Halifax, participants expressed resistance to accessing the formal health care system for fear of being approached in an unsupportive and disrespectful manner. Likewise, a study of people who use drugs in Miami found that participants were less willing to seek medical care when they felt rejected by providers or that providers were offering poor or inconsistent care and advice (Drumm et al., 2003). Research in Nova Scotia highlights the stigmatization that people who use drugs and are HCV positive (believed to be a consequence of drug use) face in emergency departments (Paterson et al., 2013). The youth in this study had experiences that confer with this larger body of literature to suggest that the hospital environment may be stigmatizing for PWID, making the hospital a poor choice for access to clean supplies.

Barriers and Facilitators to Safer Use

Participants discussed several barriers to safer use practices, such as the impact of withdrawal and not having needles when needed and the effect of location on their ability to practice safer use. These barriers may limit participants' ability to control their injection practices. However, participants also discussed several strategies they used to enable safer use, such as planning ahead to have needles available and working with peers to distribute clean needles. These strategies to make needles more available may help participants have control over practicing safer use.

Withdrawal. A key barrier to safer use many participants faced related to not having needles when needed. When participants were in withdrawal and the power of the drug was exacerbated, the need for immediate access to a needle was reportedly great. Without such immediate access, sharing or borrowing needles from others could potentially occur. This finding that not having needles when needed can impede safer practices is echoed in literature dating back two decades. Ross, Wodak, Stowe, and Gold (1994) reported that the factors most associated with sharing needles related to the urgency of being in withdrawal and needing to inject as soon as possible. Ross and colleagues note that participants in their study "frequently indicated that [sharing] was not due to the lack of general availability [of clean needles] but to availability at the time and place of injection" (p. 476). Both Power, Jones, Kearns and Ward (1996) and Hughes and Phil (2001) found that PWID would share when they were desperate for a hit and without immediate access to clean supplies. Both of these studies also note that this need to inject was largely a result of experiences of withdrawal, and individuals less dependent upon opioids were more able to wait until clean needles were available, not

unlike some of the youth in this study. A more recent quantitative study of PWID who were HCV negative found that access to needles (or lack thereof) was the strongest predictor of equipment sharing, and the authors suggest that those who shared were more likely to do so when experiencing withdrawal (Stein, Dubyak, Herman & Anderson, 2007). Finally, a study of PWID in New York City also found that PWID were more prone to sharing when experiencing withdrawal, and suggested that "periods of 'dope sickness' [withdrawal] are moments of exceptional vulnerability to HIV and HCV because they increase the likelihood of risky injection practices" (Mateu-Gelabert, Friedman, Sandoval, Wendel & Meylakhs, 2010, p. 4). Thus, there is strong evidence to suggest that among many PWID, the combination of being in withdrawal and not having needles presents a significant barrier to the practice of safer injection and an occasion during which sharing is more likely to occur. PWID become 'vulnerable' to the power of the drug. The need to inject takes precedence over the need to use safely: "addressing immediate pain overrides long-term concerns over infections" (Mateu-Gelabert et al., 2010, p. 4).

Ross and colleagues (1994) note that the sharing that results from a lack of clean needles may be more of a result of a lack of "forward planning" than of a general lack of availability of clean needles (p. 476); however the youth with whom I spoke indicated that they did plan ahead to have needles available, especially during periods when the NEP was less accessible, such as overnight or on weekends. The youth who participated in this study understood the importance of safer use and how availability of needles impacted safer use, and planning ahead was one strategy they used to increase their control over being able to practice safer use. Other research suggests that PWID can and

do plan ahead (Jackson et al., 2009; Power et al., 1996; Sirikantraporn et al., 2012). In one study of PWID accessing a NEP in New York City, planning ahead was related to ensuring a steady supply of sterile needles (Sirikantraporn et al., 2012). Participants in Jackson and colleagues (2009) study of PWID in Nova Scotia indicated that some PWID planned ahead to have enough clean supplies until the next NEP visit and carried clean supplies on their person in case they were injecting away from home. A study of PWID in England who were not in contact with harm reduction services found that the two most common strategies enacted to avoid sharing were to ensure that clean needles were available and to keep one's own used needles for re-use (Power et al., 1996). Often both of these strategies were enacted by PWID simultaneously: one participant was quoted as saying: "I avoid sharing by buying my own syringes and keep them once they're used in case I need them later" (Power et al., 1996, p. 92). Participants in Power and colleagues' study were most like the youth in this study who would plan ahead to keep their own needles to re-use, particularly if they did not think they would have access to the NEP, in an effort to avoid sharing. Thus the 'forward planning' demonstrated by participants was indeed one strategy to control their safer practices and lessen the impact of the power of the drug.

Peers. In addition to planning ahead and re-using their own needles, participants noted that peers could facilitate access to clean supplies. Peers were an important source of secondary needle distribution, both within established peer networks and through more spontaneous encounters in areas frequented by PWID. A study of PWID in California found that secondary distribution of clean needles occurred naturally among existing social networks of PWID (Snead et al., 2003). Those providing the clean needles noted

that they did so out of a desire to help others, including preventing the spread of blood borne illnesses. Those obtaining needles via secondary distribution did so primarily out of convenience, related to difficulty in accessing the NEP (Snead et al., 2003). A study of secondary needle distribution among PWID in Montreal similarly found that PWID most often received needles in this way out of convenience and/or because they were unable to get to a NEP due to their current drug-related physical or mental state or because of lack of transportation (De, Cox, Boivin, Platt & Jolly, 2007).

This finding that secondary distribution is utilized by PWID who may have difficulties in accessing NEPs is confirmed by participants in the present study where secondary needle distribution was used within networks of drug-using peers who lived further away from the NEP and/or was sought out at times when the NEP was closed. Thus, secondary needle distribution may be useful in overcoming barriers to accessing clean needles related to time of day and/or location. Secondary distribution has the potential to increase the control YWID have over safer use by facilitating access to clean supplies outside of the boundaries of formal services.

In addition to facilitating access to clean needles through secondary distribution, peers were also noted by participants as important sources of information about safer use. Peers provided information about how to inject and about services in the community. It has been suggested elsewhere that peers play an important part in the lives of some PWID and can influence risk behaviour (Bailey et al., 2007; Fast et al., 2010a; Jackson et al., 2009; Rhodes, 2009; Small et al., 2009). In their study of the social relationships of PWID, Jackson and colleagues (2009) note that PWID are sometimes a significant part of the lives of PWID and although peers at times shape unsafe practices, peers can also

contribute to safer practices by helping with injection and providing education about injecting techniques.

One youth in this study said that some PWID in her network were extremely safe and acted as "crusaders," encouraging safer practices among other PWID, thus potentially reducing the risk behaviour of others. Several studies of YWID have also noted the influence that peer group norms have in shaping risk behaviour: peers and peer group norms have been noted as influencing injection initiation (Small et al., 2009), areas that should be avoided (such as those frequented by older PWID) (Fast et al., 2010a), and the acceptability of sharing needles (Bailey et al., 2007). Thus peers appear to influence both safer and unsafe practices.

Neaigus (1998) reviewed network-based interventions among PWID and concluded that the networks of PWID are not only a determinant of risk, but can also be successfully used to prevent risk. Other research has indicated that interventions using peer education training to provide information and enhance risk-reduction skills to PWID can reduce injection-related risk behaviour (Garfein et al., 2007) and outreach using current or former PWID can effectively reach hidden and marginalized populations (Needle et al., 2005). Given the potential for peers and peer group norms to influence safer and/or unsafe practices, capitalizing on the presence and influence of "crusaders" in the community of YWID may be one way in which to increase information about, and uptake of, safer practices. However, as participants also indicated that there may be a lack of information or misinformation in the community of PWID about safer practices, care must be taken to ensure that "crusaders" are providing the correct information regarding safer practices and the transmission of blood borne illnesses.

Street Youth Who Use Injection Drugs

There are many accounts in the current literature in which homeless PWID are viewed by other PWID as the worst kind of PWID: homeless PWID are thought of as dirty and irresponsible, more likely to have blood borne illnesses, share needles, and/or dispose of used needles improperly (Hughes, 1999; Rhodes et al., 2007; Simmonds & Commber, 2009). Furthermore, Rhodes and colleagues (2007) note that there is a sense of shame involved in public injecting, which is also common among homeless PWID. Research does suggest that homeless PWID and/or PWID who inject in public are at greater risk for blood borne illnesses and are more likely to engage in unsafe practices (Corneil et al., 2006; Marshall et al., 2010; Thiede et al., 2007), however this may be related to the diminished control stemming from a being a homeless PWID and/or needing to inject in public more so than an indication that homeless PWID and/or PWID who inject in public are 'dirty'. In this study, unstable housing and public injecting appeared to have an impact on safer use: these youth needed to make more effort to have control over injection practices and the environments in which use occurred.

Those with greater resources at their disposal may be better able to avoid risk (Cooper, Moore, Gruskin & Krieger, 2005; Link & Phelan, 1995; Rhodes et al., 2005). The YWID who were homeless and/or public injectors in this study may have had fewer resources available to them, but they also appeared to enact strategies to have needles available to them to prevent sharing and be clean users. While their resources were limited, by enacting strategies to control their environment, even YWID who were marginally housed and/or public injectors were attempting to have some control over the safety of their use.

Getting Clean: Gaining Power Over Drugs

YWID in this study described the power that their drug use had over them. For many, drugs consumed their whole lives – drugs were the primary concern above all else. This finding that the lives of PWID revolve around their drug use is found in other literature (Jackson et al., 2009; Mateu-Gelabert et al., 2010). However, despite the entrenchment of drug use in the lives of participants in this study, the vast majority spoke of their experiences with "getting clean."

Predominant approaches to drug policy, and thus drug treatment, have favoured a zero-tolerance approach (Peterson, Gwin Mitchell, Hond, Agar & Latkin, 2006).

Traditional notions of 'recovery' are derived from the philosophies of self-help groups (e.g., NA) that advocate for complete abstinence (i.e., complete elimination of drug use) and view anything less as failure (Peterson et al., 2006). By this zero-tolerance approach, abstinence is the desired goal of treatment and a necessary step for people who use drugs to modify their behaviour (Peterson et al., 2006). Thus, a traditional notion of "getting clean" would mean abstinence from drug use.

Peterson and colleagues (2006) note, however, that while people who use drugs may want to cease drug use, they may be ill-equipped with the resources necessary to do so. Harm reduction approaches to substance use treatment recognize that abstinence-based treatments often have low success rates for opioid users (Canadian Centre on Substance Use, 1996, as cited in McKeganey, 2011). A harm reduction approach to treatment, in contrast to abstinence, favours incrementalism and acknowledges the importance of many individuals making small changes (e.g., reducing needle use) (McKeganey, 2011). While abstinence is not absent from harm reduction approaches to

related harms (Marlatt, 1996). Given that harm reduction acknowledges many different points along the continuum of "getting clean," the range of meanings participants attributed to "getting clean," from reducing the frequency of injecting to working to eliminate drug use, all fit within a harm reduction approach to substance use treatment.

Experiences with "getting clean" may have been common among participants in this study due to their connections with the NEP. Contact with a NEP has been related to treatment entry (Wodak & Cooney, 2006), and all youth in this study were in contact with a NEP. Furthermore, Wong, Marshall, Kerr, Lai and Wood (2009) found that injection, as well as other markers of addiction severity such as having experienced an overdose, were associated with treatment involvement among street youth. They suggest this may be the result of awareness of and opportunities for contact with treatment through associations with NEPs as well as more opportunities to have sought treatment due to longer drug-using careers (Wong et al., 2009). However, Evans and colleagues (2009) found that markers of severity of use, such as daily injection, were associated with a lesser chance of injection cessation among street youth. Furthermore, in studies that have reported MMT access among street-involved YWID seeking treatment, only six to 16 percent of participants had ever accessed MMT (Wong et al., 2009; Brands et al., 2005). Reasons why many participants in this study had experiences with "getting clean" are unknown; nevertheless, "getting clean" emerged as an important topic to almost all participants.

Methadone. The youth in this study who had been in methadone maintenance treatment (MMT), or "on methadone" described positive experiences with the low-

threshold, long-term methadone maintenance treatment program. Several felt that methadone had, or would, save them from their drug use. De Maeyer, Vanderplasschen, Camfield, van Heuk, Sabbe and Broekart (2011) examined the impact of MMT on the quality of life of persons dependent on opioids. They describe the impact of MMT as such:

Methadone had a positive impact on recovering the stability and security in opiate-dependent individuals' lives. By taking methadone, individuals were able to deal with certain problems (e.g. financial, relational), preventing further escalation of their situation. While taking methadone, opiate users could step off "the roller coaster of drug use" for a moment and take time to think about their lives (from a more long-term perspective). Methadone could provide the stability and the necessary balance some people needed to get their lives back on the right track and further develop their life plans (p. 1252).

The YWID in this study seemed to experience methadone similarly. Methadone was giving them the opportunity to stabilize themselves (e.g., not worry about withdrawal, not need to hunt for drugs) and as such was affording them the opportunity to focus on other things and get their lives "back on track." Being on methadone had reportedly allowed some participants to gain stable housing, disengage from illegal income generation activities used to support their drug habit, focus on family, and get back into school. Methadone helped to take away some of the power that opioids had and allowed these youth to begin to focus on other things.

While methadone was undoubtedly having a positive effect on the lives of many of the youth in this study, some participants also held very high hopes for MMT. For

example, one participant noted that once he got up to a higher dose, he would "be totally fine." This optimism may have been a function of their age. Very few participants had amassed multiple attempts at "getting clean" followed by relapse – most youth were embarking on their first attempt. Opioid dependence has been called a "chronic" condition where relapse is common (van den Brink & Haasen, 2006), and many individuals cycle in and out of treatment (Bell, Burrell, Indig & Gilmour, 2006). Thus, as it is (unfortunately) likely that many youth will relapse and need multiple treatment attempts, these high hopes for MMT may prove to be discouraging. However, many youth also described their hopes and dreams for a future without drugs – of going back to school, having careers, and being parents. De Maeyer and colleagues (2011) found that an important element of MMT for clients was having future goals and prospects to work towards. Thus, goals for a future without drugs and, for some, confidence in methadone's ability to get them there, may also be adaptive as they may give these youth something to strive towards.

Treatment goals in MMT. Of note, many of the youth in MMT continued to use other drugs as well. Just as participants had different goals for "getting clean," they also seemed to have different goals in MMT as well. Some participants in this study were attempting to use MMT to reduce the level of risk involved in their drug using practices and to reduce the level of other drugs that they were consuming. Lee and Zerai (2010) note that from a harm reduction perspective, engaging in treatment is in itself a positive change. Fischer, Chin, Kuo, Krist, and Vlahov (2002) and Mateu-Gelabert and colleagues (2010) suggest that some PWID enter treatment as a means of controlling their drug habit – MMT can give PWID the opportunity to reduce the amount of illicit drugs or

licit drugs used in ways other than medically directed they are using and not worry about withdrawal, and detox can bring drug tolerance back down to a more manageable level. Health Canada (2002) notes that society, programs, service providers, and clients may all have different goals for treatment. Though participants' goals may differ from traditional abstinence-based treatment goals, they still have the potential to decrease the harms of drug use. However, MMT service providers' understanding of "getting clean" may differ from clients' perspectives on "getting clean." Although a reduction in the use of other drugs is not necessarily the goal of all MMT programs (Health Canada, 2002), continued use of opioids while on MMT may put clients at risk of overdose (Centre for Addiction and Mental Health, 2008; NSW Health, 2000).

Support. Many participants, both those on and not on MMT and with different goals along the continuum of "getting clean," were making use of other forms of support as well. Participants identified both facilitators that helped them to feel like they could gain power over the drugs and barriers that hindered efforts to gain power over the drugs. Social support was noted as both an important barrier and facilitator. Participants discussed different levels of social support that they found helpful, such as peer support, formal counseling, and community programs. Some said that hearing the stories of others who were getting or had gotten clean was helpful and even inspirational. On the other hand, several participants also felt that it was necessary to "cut ties" with drugusing peers and disengage from their drug using lifestyle. This juxtaposition between needing social support while at the same time needing distance from drug-using peers, who some participants indicated may be their only friends, is noted in other literature. Participants in Brands and colleagues (2005) study indicated pressure from friends was a

primary treatment barrier, while at the same time, a lack of family and friends was also a barrier to treatment. De Maeyer and colleagues (2011) also suggested that having social contacts and being socially active were important to MMT patients and had a positive impact on their quality of life. Thus social factors are both a facilitator and barrier to "getting clean." On the one hand, social support offered youth encouragement in their efforts to "get clean" and social support could be protective against relapse. On the other hand, the wrong kind of social support could pull participants back into a lifestyle from which they were trying to disengage.

Implications for Policy and Practice

This study points to several implications for harm reduction, and health promotion, policy and practice. These implications include making harm reduction supports more available to youth who use injection drugs, as well as looking beyond the immediate environment to the broader social structures that may impact youth who use injection drugs. The Ottawa Charter for Health Promotion notes that health promotion is the process of enabling individuals to increase the control they have over their health, which includes providing individuals with the resources and opportunities needed to achieve health (World Health Organization, 1986). Having the appropriate resources and opportunities to support safer use would help participants to control the safety of their injection practices and thus lessen the impact of the power of the drug. Harm reduction initiatives, as health promotion initiatives, must enable YWID with resources for health by making the safer choice the easy choice.

Availability of Clean Supplies

The findings of this study highlight the need to make clean supplies, particularly needles, more readily available to YWID. The local needle exchange program in Halifax operates according to several best practice guidelines (Strike et al., 2006). For example, clean supplies are available on a distribution basis rather than exchange and no limits are placed on the number of supplies that may be obtained. Nevertheless, the primary reason for less safe practices to occur as cited by participants was not having needles or other clean supplies available at the time and/or place of need.

One potential strategy to increase the availability of clean supplies would be to increase the capacity of the local NEP. Participants in this study were comfortable with the NEP, thus increasing its capacity to distribute clean supplies could increase the access participants had to clean supplies. However, although the demand for the services of the NEP is constantly growing, there has not been a corresponding increase in funding – core funding to the NEP has not increased in six years (Bailey, 2012; CBC News, 2013; Patten, 2006). Thus increasing the funding, and thereby the capacity, of the NEP could help to increase YWID's access to the resources that support safer practices, thus making safer practices easier.

Participants also suggested getting more organizations involved in the distribution of clean needles. Organizations with which youth had frequent contact, such as shelters, hospitals, and drop-in centres, may serve as good locations from which to increase the distribution of clean supplies. Additionally, 24-hour needle vending machines, such as those found in Vancouver, are practical adjuncts to formal services and are useful at times when formal services are closed (Islam & Conigrave, 2007). Installing needle

vending machines in areas of heavier use throughout the city could help to reduce the barriers to accessing clean needle caused by location and hours of the NEP and pharmacies.

Supervised Injection Facilities

As noted, youth who were marginally housed and/or public injectors seemed to experience more difficulties controlling their safer use practices. Some youth had difficulty finding a secure place in which they could consistently use. Several of the youth in this study expressed a desire for a supervised injection facility (SIF) in Halifax. Legally sanctioned SIFs are supervised facilities providing clean supplies *in which PWID can inject pre-obtained drugs* as well as access health care and other services (Wood et al., 2001). The desire for a SIF in Halifax is not unique to participants in this study. A survey completed by homeless individuals in Halifax accessing care from a mobile outreach van indicated that 28 percent of respondents would use a SIF if available (Nova Scotia Housing and Homelessness Network, 2012b), and a document commemorating the twentieth anniversary of the Halifax NEP includes SIFs in a list of desired next steps moving forward (Bailey, 2012).

The only legally sanctioned Canadian SIF at present is located in Vancouver and was established in 2003. Use of the SIF among PWID has been associated with safer injecting practices, including less needle re-use, use of sterile water, cleaning the injection site, cooking and filtering drugs, less rushed injecting, safe needle disposal, and less public injecting; changes which suggest the potential for a reduction in both blood borne infections and bodily harms resulting from injection drug use (Stoltz et al., 2007b). Furthermore, the SIF has been found to be used by PWID who are at greater risk for HIV,

HCV, and overdose (Wood, Tyndall, Li, Small, Montaner & Kerr, 2005). A study of YWID who accessed the SIF similarly found that access was more likely among youth who were at greater risk of injection-related harms, including youth who were homeless (Stoltz et al., 2007a).

Opening a legally sanctioned SIF, however, is not a simple task. Vancouver's SIF, InSite, has faced a great deal of public and federal political opposition. InSite operates under a legal exemption from section 56 of Canada's Controlled Drug and Substances Act (Vancouver Coastal Health Authority, N.D.). The current federal government has made several attempts to shut down the facility; however, in 2011 the Supreme Court of Canada ruled in favour of extending InSite's exemption, emphasizing the life-saving benefits and lack of negative consequences to public health and safety (Supreme Court of Canada, 2011). The ruling also concluded that future section 56 exemptions should be granted if there is evidence that a SIF will decrease the risk of death and disease with little or no negative impact on the community, to be assessed in part by the potential impact on crime rates, local need, available funding and resources to support such a facility, and expressions of community support (Supreme Court of Canada, 2011). Hyshka, Bubela, and Wild (2013) suggest that future SIF proposals will need, and perhaps face difficulty obtaining, political will and community support. Given the local opposition to the proposed opening of a second community-based methadone clinic in Halifax in the fall of 2012 (CBC News, 2012), it is likely that a proposed SIF in Halifax would face similar community opposition. However, as there is a desire for a SIF among PWID and some community members working with PWID in Halifax,

perhaps further research is warranted to investigate the potential need and feasibility of a legally sanctioned SIF in Halifax.

Expanding Harm Reduction: Reducing the Harms to Youth Who Use Injection Drugs

Finding the resources to expand harm reduction initiatives may be difficult given the stigma that currently surrounds injection drug use. People who use injection drugs are stigmatized in their communities and by society (Ahern et al., 2007; Jackson et al., 2009; Rhodes et al., 2007; Simmonds and Coomber, 2009; Paterson et al., 2013). The current federal government is a strong opponent of harm reduction, favouring instead a punitive, ideologically-driven criminal justice approach to drug policy and substance use (Hwang, 2007; Cavalieri & Riley, 2012; Oscapella, 2012). While law enforcement receives 70 percent of the 64 million dollars in federal funding dedicated to the current National Anti-Drug Strategy, harm reduction initiatives receive just two percent of federal funding (Cavalieri & Riley, 2012). The current Strategy also does not contain any mentions of harm reduction or even needle exchange programs (Cavalieri & Riley, 2012). Furthermore, misinformation regarding harm reduction abounds (Oscapella, 2012) and public support for harm reduction in Atlantic Canada may be lacking, as Cavalieri and Riley (2012) note, "many people see harm reduction as a do-gooders' activity that coddles people who use drugs and helps them to stay hooked, at taxpayers expense" (p. 14 of 20).

The Canadian Drug Policy Coalition, a coalition of leading Canadian drug policy experts, argues for an augmentation to health and social services that engage and support people who use drugs (Carter & MacPherson, 2013). Part of this amplification would

include expanding harm reduction initiatives, including the distribution of clean supplies, supervised consumption facilities (e.g., SIFs) and opioid substitution therapy (e.g., MMT). The Canadian Drug Policy Coalition also calls for drug policies to be evidence-based and assessed and evaluated in terms of their impacts on different population groups, including youth (Carter & MacPherson, 2013). Furthermore, the Canadian Drug Policy Coalition calls for the adoption of a comprehensive health, social, and human rights approach to substance use (Oscapella, 2012). Such an approach would aim to improve the health of the entire population of people who use injection drugs and work to reduce inequities stemming from factors such as employment, income, housing, education, and access to health services (Oscapella, 2012).

Reducing inequities, promoting health. Cavalieri and Riley (2012) and the Canadian Drug Policy Coalition (Oscapella, 2012) remind us that the underlying issues that contribute to substance use include poverty, trauma, mental illness, homelessness, stigma, inequity, and disrespect. Many of the youth in this study shared with me the stories of how they began using drugs and how this use persisted and escalated. While some stories involved curiosity and experimentation, participants' experiences also included family dysfunction and family drug use, negative experiences in the foster system, sexual abuse and exploitation, mental health issues, peer influences, and a lack of educational, housing, and employment opportunities.

Research points to the complex situations that lead youth to drug use and street involvement (Fast et al., 2009, 2010a, 2010b; Feng et al., 2012; Mallett, Rosenthal & Keys, 2005) and how difficult it is for youth to move away from homelessness and drug use and back into mainstream society (Brands et al., 2005; Karabanow, 2009; Roy, Nonn

& Haley, 2008; Steensma, Boivin, Blais & Roy, 2005). Mallett and colleagues (2005) found that youth rarely reported a simple or single issue that lead to them leaving home, but family conflict was implicated in all pathways that led youth into homelessness. In Mallett and colleagues' study, one third of the sample began using drugs after becoming homeless, and linked their drug use to engagement in street culture. For other youth, their drug use has been one of the factors that had pushed them towards homelessness (Mallett et al., 2005). Recent homelessness may be the most important among the various factors likely to predict injection drug use in youth (Feng et al., 2012; PHAC, 2006b). Fast and colleagues (2010b) describe how street youth experience transitions in relation to their drug use and level of risk over time, whereby transitions to different levels of drug use and/or risk are shaped by critical moments (e.g., becoming homeless) as well as the broader context (e.g., exclusion of street youth from mainstream culture) in which youth are embedded. Roy and colleagues (2008) note that transitions to injection drug use among street youth are shaped by such factors as poor personal resources, peer influences, and entrenchment in street culture. Once on the street, homelessness is a predictor of *not* ceasing injection drug use among street-involved YIWD (Steensma et al., 2005), and heroin-using street youth believe that lack of housing will impede their ability to recover (i.e., "get clean") (Brands et al., 2005). Karabanow (2009) notes that exiting the street lifestyle is challenging and involves changes within the individual (e.g., emotional and spiritual changes) in addition to physically leaving the street. Thus, many of these youth had experienced inequities that lead to their drug use, and for some, street involvement. Now that they were injecting drugs, and many also street-involved, these youth faced barriers to gaining power over their drug use and living situations as well.

The experiences of these youth highlight areas where harm reduction initiatives could be expanded and/or improved to increase the control YWID have over safer and/or unsafe injection drug use. However, the stories of these youth also shed light on factors that can *lead* to injection drug use. A health promotion approach to substance use should address the social determinants of health (Centre for Addiction and Mental Health, 2009), which include the resources that society makes available to its members, such as the conditions of childhood, income, education, housing, and health and social services (Mikkonen & Raphael, 2010). By improving societal resources to provide youth with supportive and nurturing home lives, educational and employment opportunities, and safe and secure housing, we may be able to impact factors that can lead to and perpetuate injection drug use among youth.

Implications for Research

The results of this study of youth who use injection drugs are similar to much of the literature on what is known about adults who use injection drugs. However, this study did not find some of the barriers to accessing harm reduction supports among youth that are represented in the literature on youth who use injection drugs, such as the idea that youth in Vancouver avoid adult PWID and areas of heavy drug involvement (Fast et al., 2010a). Youth in this study avoided injecting in certain areas deemed unsafe, but avoidance of areas with heavy drug involvement was noted only when trying to get clean, and no avoidance of non-youth PWID was noted. This may suggest that YWID in Halifax do not have significantly different needs from adult PWID. It may also simply by indicative of the differences between Vancouver and Halifax. Halifax is home to far fewer PWID than Vancouver and does not have the same level of open drug trade.

Associations with non-youth PWID in Halifax may thus be less stigmatizing to youth, or as the majority of services for PWID and street youth in Halifax are located within the same neighbourhood, youth may be unable to avoid this area and the people within it.

Furthermore, many of the youth in this study were older youth, as the age range extended to 29, and many participants had relatively long histories of injection drug use given their ages. A study that focused only on younger YWID or on youth who were new initiates to injection drug use may find different results. Future research is needed to compare YWID to PWID in Halifax to determine if differences by age exist and if YWID need to be approached differently or need different levels or types of support than PWID. This study also looked at YWID as a group and did not take into account differences that may arise based on characteristics such as gender, rural versus urban living, sexual orientation, education level, and ethnicity. Future research should look at the impact of diversity on harm reduction practices of youth in Halifax to explore whether or not certain groups of youth may need additional or different supports.

Much of the literature on injection drug use among youth has focused on transitions to injection and new initiates to injection (Fast et al., 2009, 2010a; Feng et al., 2012; Goldsamt et al., 2010; Roy et al., 2008; Small et al., 2009). Many of the youth in this study were not new initiates and may not be well-served by this research. Furthermore, the finding that most participants were in MMT and/or had experiences with trying to "get clean" from injection drug use merits further exploration. Very little research has looked at experiences with "getting clean" among YWID (Brands et al., 2005; Galanter et al., 2007; Wong et al., 2009), and even less has focused on the experiences of YWID on methadone (Hopfer et al., 2002). "Getting clean" was an

important experience to many of the youth in this study and highlighted the complexities of their drug use and the control they were attempting to gain over their lives.

Furthermore, many participants ascribed very positive meanings to methadone. Given that rates of recovery from opioid use are poor (Bell et al., 2006; Evans et al., 2009; Hser, Hoffman, Grella & Anglin, 2001; van den Brink & Haasen, 2006), ways in which YWID can be supported in efforts to get clean may be extremely important. Future research should explore the experiences of YWID who are attempting to "get clean" and/or on methadone, including ways in which reductions in, or an elimination of, drug use may be supported.

Final Thoughts

Juliet Corbin said "it is not distance that qualitative researchers want between themselves and their participants, but the opportunity to connect with them at a human level" (Corbin & Strauss, 2008, p. 13). I was moved by the stories of the 10 youth who took part in this study and I am very grateful to their willingness to speak candidly with me. I hope I have represented your voices well.

I would also like to comment on the stigma and marginalization faced by youth who use injection drugs. The youth with whom I spoke were intelligent and resourceful individuals with hopes and goals for their futures. In any circumstance in which a young person is labeled, and in particular labeled negatively, the impetus to grow and change is stifled (Dweck, 2006). While all of these youth used injection drugs, I wish to acknowledge that they were also much more than just injection drug users.

We can never judge the lives of others, because each person knows only their own pain and renunciation. It's one thing to feel that you are on the right path, but it's another to think that yours is the only path.

-- Paulo Coehlo

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Appendix A: Interview Guide

Interview Guide

Before we begin, please remember that your participation in this interview is voluntary, and you are free to skip any question you do not want to answer or to end the interview early. This is a confidential interview. There are no right or wrong answers to any question, and I'm not here to judge your actions.

Please **do not** tell me of your HIV or Hepatitis C status.

Do you have any questions before we begin?

Beginning of open interview: [Note – text in bold for interviewer reference only] I want to hear your story. Can you tell me when you started using drugs?

Do you remember why you started injecting?

Part 1: Typical time using injection drugs.

1. Let's move to the present. Can you walk me through a typical time that you use injection drugs? Walk me through where you use, who you use with, where you get your paraphernalia.

[Kelly - check if they are okay throughout this conversation]

- a. Where do you use?
 - i. (E.g. park, bathroom, friends house, dealer's place)
- b. Who are you with?
 - i. (E.g. alone, friends, family, other users, older users)
- c. What supplies do you use?
 - i. Where do you get them?
 - ii. Are there times you don't have clean supplies?

Part 2a: Understanding of and Influences on Safer / Unsafe Injecting

- 2. What does safer use mean to you?
 - a. E.g. not sharing with anyone, not sharing with strangers, etc.
 - b. E.g. not sharing needles only, not sharing any drug equipment
- 3. Where do you typically get clean needles and supplies?
 - a. Can you tell me a little about that?
 - b. What happened if you couldn't get them that way? What do you do?
- 4. Can you tell me a little about where you get your information about using safely?

Part 2b: Practices of Safer / Unsafe Injecting

- 5. Can you tell me a little about your safer and/or unsafe using practices? What typically happens?
 - a. Can you tell me about that?
 - b. Are there time, places, people, that make this hard to do? Why?

6. Are there things that could help you use safer?

Part 3: Resources and Supports

- 1. Let's talk about the resources and supports that are out there for you
 - a. What is there?
 - b. How do they help?
 - c. How don't the help?
 - d. How could they help better?
 - e. Where do you go?
 - f. Where don't you go
 - g. Where else do you go?
 - i. (E.g. friends, family, dealers)
- 2. What else would help keep you safe?
 - a. What would you recommend?
 - i. Improve what's already there
 - ii. New ideas

Nearing the end of open interview questions:

1. Is there anything else you think I should know that would help me understand how you practices safer injection? That would help me understand your experiences accessing clean needles and other equipment?

Demographic information:

To end the interview, I would like to know a little bit more about you. Remember you don't have to answer any questions you don't want to answer. Outside of your drug use, what is important for me to know about you?

Final questions:

- 1. Is there something I haven't asked that you would like to answer?
- 2. Is there anything you would like to ask me?

TURN OFF AUDIO-RECORDERS

I'm going to turn off the audio-recorder now and ask you a few questions about your age and so forth.

Specific Demographic Information (hand-record):

- a. Age
- b. Gender identity (e.g. male, female, transgender, bi-gender)
- c. Employment
- d. Housing status

Thank you very much for taking the time to chat with me today. I really appreciate everything you have told me, it has been very helpful.

Here is a list of services that are available in the community that might be helpful to you. If you feel you need assistance or to talk, please contact one of these organizations.

If you know any friends who are between the ages of 16 and 29 and have used injection drugs in the past 30 days who may be interested in participating, please give them my contact information. If you know of people who are not currently using formal services, like [names of organizations], I would be interested in talking with them. I have cards here with my contact information on them you can take. Please do not send me anyone's contact information – the person wanting to be interviewed would have to contact me themselves or I cannot respond. OR you can tell them that you set up this interview by going to [name of organization] and they can go to [names of organizations] and do the same thing.

Next fall, I will give summaries of my research findings to [names of organizations]. You are welcome to pick up a copy at either of these locations.

If you have any questions, please do not hesitate to contact me. My contact information is on the consent papers you got at the beginning of the interview.

Appendix B: Pre-Test Consent Form

Interview Guide Pre-Test CONSENT FORM

Study Title: AN EXPLORATION OF YOUTHS' UNDERSTANDINGS AND PRACTICES OF SAFER AND/OR UNSAFE INJECTION DRUG USE

Degree Program: Masters of Arts, Health Promotion

School of Health and Human Performance

Dalhousie University

Principal Investigator: Kelly Adamson

School of Health and Human Performance

Dalhousie University 6230 South Street

Halifax, Nova Scotia, B3H 4R2 Telephone: 902-789-1220

Research Supervisor: Dr. Lois Jackson

School of Health and Human Performance

Dalhousie University 6230 South Street

Halifax, Nova Scotia, B3H 4R2

Telephone: 902-494-1341 or 902-494-6316

Committee Members: Dr. Jacqueline Gahagan

School of Health and Human Performance

Dalhousie University 6230 South Street

Halifax, Nova Scotia, B3H 4R2

Telephone: 902-494-1155

Dr. Jeff Karabanow

School of Social Work Dalhousie University 6414 Coburg Road

Halifax, Nova Scotia, B3H 2A7

Telephone: 902-494-1193

Dr. Fiona Martin

Department of Sociology and Social Anthropology

6135 University Avenue

Halifax, Nova Scotia, B3H 4R2

Dalhousie University Telephone: 902-494-6750 Contact Person: Kelly Adamson

School of Health and Human Performance

Telephone: 902-789-1220

Please feel free to contact the person above if you have any questions, comments, or concerns regarding this study.

PRE-TEST CONSENT FORM

Introduction

You are invited to participate in a pre-test for an interview guide that will be used with a research study being conducted by myself, Kelly Adamson. I am graduate student at Dalhousie University, and this study is part of my Masters of Arts program. Your assistance today is voluntary and you may withdraw at any time. We will go over a description of this pre-test and the larger study, and any risks, inconveniences, or discomfort that you might experience. Participating in the pre-test might not benefit you, but you could help me to learn things that will benefit others. If you have any questions about the study, please discuss them with me.

This copy of the consent form is yours to keep.

Purpose of the Study and Pre-Test

The purpose of this study is to explore youths' experiences and understandings of safer and/or unsafe injection drug use, and the key social factors that influence these practices. I want to know if there is anything that potentially prevents you from injecting safer, and if there is anything that potentially helps you or could help you to inject safer.

You will be asked to pre-test the interview guide that I will use when I interview youth who use injection drugs as part of my study. You will be asked to help me ensure that the interview guide is okay to use in this study.

Pre-Test Design and What you will be asked to do

During the pre-test today, I will ask you to help me with the wording and content of the questions in the interview guide. I will ask you to go over the questions with me and suggests ways in which I could make them better. The pre-test will be conducted in this room at [name of organization] and is expected to last approximately one hour, but may take more or less time. I will take notes about what you think I should do to improve the interview guide.

Please **do not** disclose your HIV or Hepatitis status during the pre-test.

You will not be contacted by me again after this meeting.

Who Can Participate in the Pre-Test

You can participate in the pre-test if you are between the ages of 16 and 29 and currently in recovery from injection drug use (i.e. you have not used injection drugs in the past 30 days).

Who will be Conducting the Research

I (Kelly Adamson) will be doing this research with the help of my supervisor, Dr. Lois Jackson, who is also from Dalhousie University, and my committee members, Dr. Jacqueline Gahagan, Dr. Jeff Karabanow, and Dr. Fiona Martin, who are from Dalhousie University as well.

Possible Risks and Discomforts

The risks you may face by assisting me are moderate. We will be talking about injection drug use, which could make you feel uncomfortable. Please remember to only share with me what you feel comfortable sharing. If there is a question you do not wish to give your feedback on, let me know and we will skip it. If you want to end the meeting early, you can do so at any time. I do not want anything that we discuss today to harm your recovery process, so if you need to leave at any time, please know you are free to do so.

When we end the pre-test, I will give you a list of resources in the community that you can contact if you need assistance. Either [names] will also be available after the interview if you need to talk.

Possible Benefits

By participating in the pre-test, you will be able to share your knowledge and experiences on a topic that you are knowledgeable about. You are not likely to experience any other personal benefits. Your assistance today will help me to conduct a better study, and it is possible that the results from this study may benefit other youth by providing a better understanding of how youth understand and practice safer and/or unsafe injection.

Honorarium

You will receive a 15 dollar honorarium to thank you for your time in helping me today. If you chose not to look at a question or if you chose to leave the meeting early, you will still keep this honorarium.

Confidentiality and Anonymity

I will take notes about what you tell me about the interview guide today. These notes will be shared with my supervisor and my committee and with them I will incorporate the changes you suggest to the interview guide. I am not recording your name, I am not going to take notes about any personal information you share today, and I will not share any personal information that you tell me today with anyone, including my supervisor and committee.

It is important for you to know that if you tell me anything about a child (16 or under) who is being abused or neglected, or about an adult in need of protection who is being abused or neglected, I have a legal obligation to tell the appropriate authorities (i.e. police or child/adult protective services) about this to ensure their safety.

Termination

As mentioned earlier, you can end the interview at any time. I can also choose to end the interview early. In either case, you will still keep the 15 dollar honorarium.

Dissemination

When I come to the end of my research process, I will be putting together a summary to give an overview of what I have found. I will give [names of organizations] copies of this summary.

Questions

If you have questions for me, or if you think of any questions later on, please ask. If you think of questions or have questions after we are done here today, you can contact me at 902-789-1220. You can also contact my supervisor, Dr. Lois Jackson.

Problems or Concerns

If you have any difficulties with, or wish to voice a concern about, any aspect of your participation in this study, you may contact Catherine Connors, Director of Research Ethics at Dalhousie University, by phone at 902-494-1462, for assistance.

Principal Investigator and contact person: Kelly Adamson 902-789-1220

Research Supervisor: Dr. Lois Jackson 902-494-6316

Director of Ethics, Dalhousie University:

Catherine Connors 6299 South Street, Suite 231 Halifax, NS, B3H 4R2 902-494-1462

VERBAL CONSENT: (read and completed by researcher)

(recorded	by researcher)
	aything about this form that was unclear to you? (yes – record / no) at was unclear?
(recorded	by researcher)
Have I ans	swered any questions that you have at this time? (yes / no)
Do you co	onsent to helping me with the interview guide today?
Researche	er Signature

Researcher has given 15.00 dollar honorarium to participant (yes / no)

Appendix C: Ethics Approval



Health Sciences Research Ethics Board Letter of Approval

Date: August 22,2012.

To: Andrea Kelly Adamson, School of Health and Human Performance Dr. Lois Jackson, School of Health and Human Performance

The Health Sciences Research Ethics Board has reviewed the following application for research involving humans:

Project # 2012-2763 (v2) (R# 1011616)

Title: An Exploration of Youths' Understandings and Practices of Safer and /or Unsafe Injection Drug Use

and found the proposed research to be in accordance with Dalhousie Guidelines and the Tri - Council Policy Statement on *Ethical Conduct for Research Involving Humans*. This approval will be in effect for 12 months from the date indicated below and is subject to the following conditions:

- 1. Prior to the expiry date of this approval an annual report must be submitted and approved.
- Any significant changes to either the research methodology, or the consent form used, must be submitted for ethics review and approval prior to their implementation.
- You must also notify Research Ethics when the project is completed or terminated, at which time a final report must be completed.
- 4. Any adverse events involving study participants are reported immediately to the REB.

Effective Date:	August 22,2012.	signed:		
Expiry Date:	August 22,2013.		Dr. Brenda Beagan	(Chair)

IMPORTANT FUNDING INFORMATION - Do not ignore

To ensure that funding for this project is available for use, you \underline{must} provide the following information and \underline{FAX} this page to $\underline{RESEARCH}$ $\underline{SERVICES}$ at $\underline{494-1595}$

Name of grant /contract holder	Dept				
Signature of grant / contract holder					
Funding agency					
Award Number	Dal Account # (if known)				

Dalhousie Research Services • Research Ethics • 6299 South Street, 2nd Floor, Suite 231 ,PO Box 15000• Halifax, NS, Canada • 63H 4R2 Tel: 902-494-3423 • Fax: 902-494-1595 • Email: ethics@dal.ca • www.dal.ca/~research

Appendix D: Consent Form

CONSENT FORM

Study Title: AN EXPLORATION OF YOUTHS' UNDERSTANDINGS AND PRACTICES OF SAFER AND/OR UNSAFE INJECTION DRUG USE

Degree Program: Masters of Arts, Health Promotion

School of Health and Human Performance

Dalhousie University

Principal Investigator: Kelly Adamson

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Halifax, Nova Scotia, B3H 4R2 Telephone: 902-789-1220

Research Supervisor: Dr. Lois Jackson

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Telephone: 902-494-1341 or 902-494-6316

Committee Members: Dr. Jacqueline Gahagan

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Dr. Fiona Martin

Department of Sociology and Social Anthropology

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Halifax, Nova Scotia, B3H 4R2

Dalhousie University Telephone: 902-494-6750

Contact Person: Kelly Adamson

School of Health and Human Performance

Telephone: 902-789-1220

Please feel free to contact the person above if you have any questions, comments, or concerns regarding this study.

CONSENT FORM

Introduction

You are invited to take part in a research study being conducted by myself, Kelly Adamson. I am graduate student at Dalhousie University, and this study is part of my Masters of Arts program. Your participation in this study is voluntary and you may withdraw from the study at any time. We will go over a description of this study, which will tell you about the risks, inconveniences, or discomfort that you might experience. Participating in the study might not benefit you, but we may learn things that will benefit others. If you have any questions about the study, please discuss them with me.

This copy of the consent form is yours to keep.

Purpose of the Study

The purpose of this study is to explore your experiences and understandings of practicing safer and/or unsafe injection drug use, and the key social factors that influence these practices. I want to know if there is anything that potentially prevents you from injecting safer, and if there is anything that potentially helps you or could help you to inject safer.

Study Design

I (Kelly Adamson) am collecting information for this study by conducting 6 to 10 face-to-face interviews at [names of organizations]. During the interview, I will ask you to talk about how you understand safer and/or unsafe injection drug use and your experiences of safer and/or unsafe use.

Who can Participate in the Study

You may participate in this study if you are between the ages of 16 and 29, and if you have engaged in injection drug use of illicit drugs or licit drugs in ways other than medically directed in the past thirty (30) days. You may <u>not</u> participate if you are injecting hormones or steroids only.

Who will be Conducting the Research

I (Kelly Adamson) will be doing this research with the help of my supervisor, Dr. Lois Jackson, who is also from Dalhousie University, as well as my committee members, Dr. Jacqueline Gahagan, Dr. Jeff Karabanow, and Dr. Fiona Martin, who are all from Dalhousie.

What you will be asked to do

If you chose to participate in this study, you will need to give me permission to interview you so that I know that you are agreeing to participate voluntarily. Then you will be interviewed by me. The interview will be conducted either at [names of organizations], and, with your permission, will be audio-recorded. If you do not want to be audio-recorded, I will take notes of our conversation.

The interview is expected to last approximately one hour, but may take more or less time. During the interview, I will ask you questions about your drug use, what you think is

safer and/or unsafe use, safer and/or unsafe injection practices, and where you get clean needles and equipment and information about drug use, and then I will ask you questions about your age, gender identity, housing and employment status.

Please **do not** disclose your HIV or Hepatitis status during the interview.

You will not be contacted by me again after the interview.

Possible Risks and Discomforts

The risks you may face by participating in this study are moderate. Talking about your use of injection drugs may be upsetting for you because you may talk about personal experiences that might have been uncomfortable or distressing. Please remember that you should only share information you feel comfortable talking about. You may chose not to answer any question, and you may also chose to end the interview at any time.

When we end the interview, I will give you a list of resources in the community that you can contact if you need assistance.

Possible Benefits

In participating in the interview, you may be given an opportunity to express your views and opinions on a topic that concerns you. You are not likely to experience any other personal benefits. It is possible that the results from this study may benefit youth similar to yourself by providing a better understanding of how youth understand safer and/or unsafe injection practices and how youth experience accessing safer injection equipment.

Honorarium

You will receive a 20 dollar honorarium to thank you for your time in participating in this study. This will be given to you before we start the interview. If you chose not to answer a question or if you chose to leave the interview early, you will still keep this honorarium.

Confidentiality and Anonymity

Confidentiality means that your name will not be attached to the data. I will type up what you have said today word-for-word, and when I do that, I will remove any information that I think might personally identify you. Once things that could personally identify you have been removed, my supervisor (Dr. Lois Jackson), and the members of my committee (Dr. Jacqueline Gahagan, Dr. Jeff Karabanow, and Dr. Fiona Martin) will have access to the information. I will use the information you provide today as part of my final paper for this study as well as presentations and other publications.

You will not be personally identified by your name in any papers, publications, or presentations. With your permission, what you say may be used in the form of direct quotes taken from the interview. I will take every precaution to protect your privacy and will not use a quote if I think the content may identify you.

However, please note that despite best efforts to protect your personal identity, the possibility exists that you might be identified as providing the quotation.

It is important for you to know that if you tell me anything about a child (16 or under) who is being abused or neglected, or about an adult in need of protection who is being abused or neglected, I have a legal obligation to tell the appropriate authorities (i.e. police or child/adult protective services) about this to ensure their safety.

Also, if I am subpoenaed or the data are subpoenaed by a court of law, I have to provide the information from this study.

If you give me permission to digitally record our interview today, I will delete the recordings after I have typed what was said into my computer. The information will be kept in a locked filing cabinet at Dalhousie University for a minimum of 5 years. After this, it will be destroyed.

Please note, your access to services and organizations in the community **will not** be affected by your participation in this interview.

Termination

As mentioned earlier, you can end the interview at any time. I can also choose to end the interview early. In either case, you will still keep the \$20 honorarium.

Dissemination

When I come to the end of my research process, I will be putting together a summary to give an overview of what I have found. I will give [names of organizations] copies of this summary.

Ouestions

If you have questions for me, or if you think of any questions later on, please ask. If you think of questions or have questions after we are done here today, you can contact me at 902-789-1220. You can also contact my supervisor, Dr. Lois Jackson.

Problems or Concerns

If you have any difficulties with, or wish to voice a concern about, any aspect of your participation in this study, you may contact Catherine Connors, Director of Research Ethics at Dalhousie University, by phone at 902-494-1462, for assistance.

Principal Investigator and contact person: Kelly Adamson 902-789-1220

Research Supervisor: Dr. Lois Jackson 902-494-6316

Director of Ethics, Dalhousie University:

Catherine Connors 6299 South Street, Suite 231 Halifax, NS, B3H 4R2 902-494-1462

VERBAL CONSENT: (read and completed by researcher)

Do you understand the information we have just gone over? (circle yes / no) Have I answered any questions that you have at this time? (yes / no)

Do you consent to take part in this study (so do you consent to being interviewed by me?) (yes / no)

Is it okay if I tape record the interview today? (yes / no)

Is it okay if I use quotations from what you have said today when I write up and present any findings from my thesis paper? (The quotations I use will not personally identify you as the person who said them). (yes / no)

Researcher			
Signature			

Researcher has given 20.00 dollar honorarium to participant (yes / no)