

Mitigating structural vulnerability for people who use drugs at the clinical- and policy-level

by

Nicole Dawn Gehring

A thesis submitted in partial fulfillment of the requirements for the degree of

Master of Science

in

Health Policy Research

School of Public Health
University of Alberta

© Nicole Dawn Gehring, 2021

Abstract

People who use illegal drugs (PWUD) often face adverse socio-political contexts (e.g., poverty, homelessness, racialization, criminalization) that make them structurally vulnerable. Structurally vulnerable PWUD experience elevated exposure to stigmatization, discrimination, and cultural oppression which increases their risk of drug-related harm. These groups of PWUD often have health and social care needs that go unmet. Service providers and policies typically do not sufficiently address the underlying structural factors that lead to substance-related harm. A critical link to mitigating structural vulnerability lies in understanding the perspectives of clinicians and policy actors who inform decisions that govern the lives of PWUD. Therefore, the overarching goal of this thesis was to explore structural vulnerability at the clinical- and policy-level through the perspectives of social care providers and policy actors.

Two qualitative studies addressed this goal. Study 1 focused on the clinical-level and analyzed 18 semi-structured interviews conducted with social care providers caring for PWUD at a large, urban acute care hospital in Western Canada. Study 2 focused on the policy-level and analyzed 73 semi-structured interviews conducted as part of the Canadian Harm Reduction Policy Project. Participants included policy actors from all 13 Canadian provinces and territories who were involved in harm reduction and drug policy within their respective jurisdictions. Latent content analyses were conducted for both studies, informed by critical realism.

At the clinical-level, there were contradictions in how different Study 1 participants discussed patient-level barriers to providing social care. Some blamed poor outcomes on patient deficits in motivation, while others emphasized structural factors that impede patients' ability to secure income, housing, and other social supports. Within the hospital, some participants felt that acute care was not the appropriate setting to address social needs, but most felt that hospital

visits afford a rare opportunity to address health inequities and reach structurally vulnerable patients who use drugs who otherwise have limited access to effective care in the community. Participants described gaps in community services, particularly in housing and financial supports, which limited successful social care provision. Finally, several potential policy solutions were identified, including establishing better transitional and permanent housing supports that comprehensively address medical, income, and substance use needs.

At the policy-level, participants in Study 2 acknowledged the central role of structural vulnerability (e.g., poverty, homelessness, racialization) in drug use and related harm across the provinces and territories. Criminalization, in particular, was seen as a major contributor to structural vulnerability by justifying a litany of formal and informal sanctions against drug use, and by extension PWUD. Many participants expressed that their personal understanding of harm reduction included addressing the structural conditions facing PWUD, but stated that formal government policies often ignore or downplay the centrality of addressing structural conditions for improving the wellbeing of PWUD. Participants identified several potential policy solutions to intervene on structural vulnerability, including decriminalization, safer supply, and enacting policies encompassing all health and social sectors.

This thesis offers unique insight on structural vulnerability and substance use from the perspectives of social care providers and policy actors which have been lacking from the broader literature on structural vulnerability. Taken together, findings from this thesis reinforce structural vulnerability as a main contributor to drug-related harm for PWUD and highlight services and policies that could better address the structural conditions in which PWUD live. Overall, it is apparent that more comprehensive efforts are needed to develop and implement both services and policies aimed at mitigating structural factors for PWUD.

Preface

This thesis is original work by Nicole Gehring, in primary collaboration with Dr. Elaine Hyshka (EH), as well as guidance from supervisory committee members Dr. Ginetta Salvalaggio (GS) and Dr. Bernie Pauly (BP). Additional research support was provided by Ms. Kelsey Speed (KS). The research described herein received ethical approval from the University of Alberta Health Research Ethics Board (Pro00053613 [Study 1]; Pro00052053 [Study 2]). Contributions of each collaborator are outlined below.

Chapters 1 and 4 are original works of Nicole Gehring, who synthesized the literature. EH provided primary and overarching guidance of these chapters with supplementary feedback from GS and BP. The research project from which Chapter 2 derived was conceived and designed by EH. EH provided primary guidance, GS and BP provided intellectual feedback, and KS provided research support. EH was the Principal Investigator of the dataset used for Chapter 3. As with Chapter 2, EH was the primary supervisor, GS and BP provided overarching guidance, KS provided research support. Members of an advisory group (people who have lived/living experience of drug use, homelessness, and hospitalization) provided feedback on the interpretation of the findings from both studies as well as feedback on the overall thesis recommendations. No part of this thesis has been previously published. Portions of this research were presented at scientific conferences and knowledge translation events, including:

- University of Alberta This is Public Health Week. Edmonton, Alberta. (2019, November).
- Canadian Federation of University Women Edmonton Annual General Meeting. Virtual (2021, January)
- Canadian Association for Health Services and Policy Research Annual Conference. Virtual (2021, May)

Acknowledgments

I would like to first and foremost acknowledge that I am a settler on land belonging to Indigenous Peoples. The research described herein was conducted on Treaty 6 territory, a traditional gathering place for diverse Indigenous Peoples including the First Nations, Métis, Inuit, and many others. As a settler, I would like to acknowledge the historical and ongoing colonization and systemic oppression denying and/or restricting Indigenous Peoples' histories, languages, and cultures.

I would like to thank Dr. Elaine Hyshka for her supervision, guidance, and expertise throughout my thesis. She held me to a high academic standard and continuously challenged me, undoubtedly strengthening my abilities as a researcher. I would like to thank Dr. Ginetta Salvalaggio and Dr. Bernie Pauly for their ongoing support as committee members. They offered invaluable insights and feedback over the course of my thesis. Thank you to my colleagues Kelsey Speed and Brynn Kosteniuk who provided moral and technical support from day one. A very special thank you to the advisory group members who gave their time to corroborate my findings and provide additional context to my thesis recommendations. Thank you to Dr. Ginetta Salvalaggio for facilitating the connection to the advisory group. Thank you to the participants who provided their time and thoughts that formed the basis of this thesis. I would like to thank the agencies who provided financial and in-kind support that contributed to this thesis (in alphabetical order): Addiction Recovery and Community Health (ARCH); Alberta Health Services (AHS); the Canadian Federation of University Women (CFWU) Edmonton; the Canadian Institute of Health Research (CIHR); the Inner City Health and Wellness Program (ICHWP); Policywise for Children and Families; the University of Alberta School of Public Health; and the Royal Alexandra Hospital Foundation (RAHF). A very special thank you to the

University of Alberta and CFWU Edmonton for financially supporting my work as a graduate student. Thank you to my parents, family, and friends. Thank you to my sister who enthusiastically supports all my life endeavours. Last but not least, this thesis would not have been possible without the unconditional support of my partner; thank you for being the unwavering presence in my times of doubt and triumph.

Table of Contents

Abstract	<i>ii</i>
Preface	<i>iv</i>
Acknowledgments	<i>v</i>
List of figures and tables	<i>x</i>
Glossary of abbreviations	<i>xi</i>
Chapter 1: Introduction	<i>1</i>
1.1 Literature review	2
1.1.1 Substance use and adverse health outcomes	2
1.1.2 People who use drugs and structural vulnerability	4
1.1.3 Structural competency among health, social, and policy professionals	9
1.1.4 Acute care and structural vulnerability	12
1.1.4.1 Study 1 rationale and objectives	17
1.1.5 Harm reduction and structural vulnerability	18
1.1.5.1 Study 2 rationale and objectives	22
1.2 Overarching approach	23
1.3 Thesis structure	24
Chapter 2: “Sometimes, I honestly feel hopeless”: Social care providers’ perspectives on caring for structurally vulnerable patients who use drugs	25
2.1 Introduction	25
2.2 Methods	27
2.2.1 Study design	27
2.2.2 Study setting	28
2.2.3 Data collection and participants	29
2.2.4 Data analysis	30
2.3 Results	31
2.3.1 “There are people [who] unconsciously or consciously subscribe to an individualist orientation”: Conflicting views on patient-level barriers to care	32
2.3.2 “If we view health from a medical model, we’re not understanding the social determinants of health”: The contested role of the hospital in social care provision	34

2.3.3 “It’s almost like they’re set up for failure”:	Gaps in community health and social systems	36
2.3.4 “We need to look at this from a very holistic perspective”:	The need for comprehensive socio-structural interventions and policy change	39
2.4 Discussion		41
2.4.1 Strengths and limitations		45
2.4.2 Conclusion		46
Chapter 3: “These harms exist because of the system”:	Policy actor views on structural vulnerability in harm reduction and policymaking for illegal drugs	47
3.1 Introduction		47
3.2 Methods		50
3.2.1 Sampling and recruitment		50
3.2.2 Data collection		51
3.2.3 Participants		51
3.2.4 Data analysis		52
3.3 Results		54
3.3.1 “Drug-related harms aren’t experienced equally across all populations”:	Awareness of structural vulnerabilities associated with illegal drug use	54
3.3.2 “We have harmful drug policies”:	Prohibitionist policies shape structural vulnerability in diverse ways	56
3.3.3 “There’s a fundamental tension in harm reduction and policymaking”:	The contested scope of drug policy	58
3.3.4 “The things that we’re doing right now, honestly is just keeping some people alive”:	The need for more comprehensive policies addressing structural vulnerability	60
3.4 Discussion		63
3.4.1 Strengths and limitations		67
3.4.2 Conclusions		68
Chapter 4: Conclusions		69
4.1 Main findings		69
4.2 Strengths and limitations		71
4.3 Policy and practice implications		73
4.4 Considerations for future research		76
4.5 Conclusions		77

References	78
Appendices	112
Appendix A: Semi-structured interview guide (Study 1)	112
Appendix B: Semi-structured interview guide (Study 2)	116
Appendix C: Frameworks guiding block coding (Study 2)	119

List of figures and tables

Figure 2.1 Main themes organized within the socioecological model [326] (figure adapted from Barbara et al., 2017 [330]).	32
Table 3.1 Policy actors categorized by jurisdiction	52

Glossary of abbreviations

AIDS	Acquired immunodeficiency syndrome
AMCT	Addiction medicine consult team
AB	Alberta
BIPOC	Black, Indigenous, and People of Colour
BC	British Columbia
CHARPP	Canadian Harm Reduction Policy Project
HCV	Hepatitis C virus
HIV	Human immunodeficiency virus
LGBTQ+	Lesbian, Gay, Bisexual, Transgender, Queer or Questioning +
MB	Manitoba
NB	New Brunswick
NL	Newfoundland
NWT	Northwest Territories
NvT	Nunavut
ON	Ontario
PWUD	People who use illegal drugs
PEI	Prince Edward Island
QC	Quebec
SK	Saskatchewan
SCP	Other social care provider
SDH	Social determinants of health
SW	Social worker
SUD	Substance use disorder
YT	Yukon

Chapter 1: Introduction

This thesis contributes to the literature on the structural vulnerability of people who use illegal drugs¹, with an emphasis on how social care providers and policy actors perceive and influence the structural factors shaping the lives of people who use drugs. This thesis adopts a paper-based format and includes an introduction chapter, two chapters each outlining Study 1 and Study 2 in manuscript form, and a conclusion chapter. Chapter 1 starts with an in-depth literature review in relation to both studies, including: 1) substance use and adverse health outcomes; 2) people who use drugs and structural vulnerability; and 3) structural competency among health, social, and policy professionals. A literature review specific to Study 1 then follows on acute care and structural vulnerability. The rationale and objectives for Study 1 are then detailed. Chapter 1 continues with a literature review on harm reduction and structural vulnerability specific to Study 2, along with the rationale and objectives of this study. Chapter 2 reports the results of Study 1, a study analyzing qualitative interview data on social care providers' perspectives on caring for structurally vulnerable patients who use drugs and are experiencing homelessness and/or unstable housing within acute care. Chapter 3 details the results of Study 2, a study analyzing qualitative interviews conducted as part of the Canadian Harm Reduction Policy Project, which explored policy actors' views on structural vulnerability in harm reduction and policymaking for illegal drugs. The concluding chapter synthesizes the main thesis findings, describes clinical and policy implications, and provides possible directions for future research.

¹ The term people who use drugs is used throughout this thesis to describe people who use illegal drugs (e.g., criminally prohibited drugs or the misuse of prescription medications) through injection, inhalation, intranasal, and/or oral routes of administration.

1.1 Literature review

1.1.1 Substance use and adverse health outcomes

Illegal drug use is a growing concern in Canada. In the most recent Canadian survey, past-year illegal drug use (including cocaine or crack, ecstasy, speed or methamphetamines, hallucinogens, and/or heroin) was reported by 987,000 Canadians in 2017, an increase from 678,000 in 2015 [1]. Use of illegal drugs were higher among males compared to females at 5% and 2% respectively, and highest among young adults aged 20 to 24 (10%) [1]. In 2012, approximately 21.6% of the Canadians (roughly six million people) aged 15 years or older met the criteria for substance use disorders (SUDs)—defined as an individual's recurrent or prolonged use of alcohol and/or other drugs leading to clinical and/or functional impairment [2]—at least once in their lifetime. Of this group of people, 4% experience SUDs involving drugs other than tobacco, alcohol, and cannabis [3].

People who use illegal drugs (PWUD) are at an increased risk of developing adverse health outcomes [4-6]. Substance use, particularly when complicated by injection drug use, increases susceptibility for human immunodeficiency virus (HIV), Hepatitis C virus (HCV), and other sexually transmitted and blood borne infections, as well as cutaneous and subcutaneous abscesses, talcosis, and endocarditis [7]. PWUD also experience high rates of co-occurring mental illness [8]. The drug poisoning emergency (e.g., clandestinely-produced synthetic opioids) is a principal contributor to fatal and non-fatal overdoses [9-11]. Canada's national drug poisoning emergency has escalated dramatically since 2014 and has been exacerbated by the COVID-19 pandemic [12, 13]. For example, prior to the COVID-19 pandemic, the highest quarterly count of opioid-related deaths was 1,766 [13]. Since the onset of COVID-19, the

quarterly count of opioid overdose deaths was 5,148 between July and September 2020 [13], reducing life expectancy rates in Canada [14, 15].

Adverse health outcomes for PWUD are further compounded by intersecting social categories, such as socioeconomic status, race, gender, and sexual orientation [16]. PWUD who experience homelessness and/or unstable housing face additional extreme health inequities across a wide range of conditions [17]. For example, people experiencing homelessness have high mortality rates and adverse health outcomes partly due to risk behaviours associated with drug use [18-20]. People experiencing homelessness who use drugs are at risk for physical illnesses, including traumatic brain injury [21], dental problems [22], malnutrition [23, 24], and abscesses [25], among others. Substance use is a significant cause of mortality among people experiencing homelessness. When compared to the general population, mortality rates associated with illegal drugs are approximately 8 to 17 times higher amongst people experiencing homelessness [26]. Public drug use (e.g., consumption in streets, parks, washrooms) among those experiencing homelessness is common and heightens the possibility of HCV and HIV transmission [27-29]. The prevalence of HIV and HCV is higher among homeless populations compared to housed populations [30-32].

Racial minorities (e.g., Black, Indigenous, and People of Colour [BIPOC]) who use drugs face several health disparities due to racialization, discrimination, and marginalization such as higher rates of HIV and substance use [33-37]. Canada faces distinct health disparities amongst Indigenous Peoples (including First Nations, Métis, Inuit). Indigenous Peoples in Canada experience a disproportionate burden of ill health and substance use compared to non-Indigenous populations [33, 34] including higher rates of homelessness, HIV, and HCV compared to non-Indigenous PWUD [38-40]. Despite accounting for only 4.9% of the Canadian population [41],

Indigenous communities are also disproportionately affected by the drug poisoning emergency [42]. Opioid-related mortality rates in Alberta and British Columbia were approximately 3 to 4 times higher among individuals identifying as First Nations than non-First Nations in 2018 [43, 44]. The drug poisoning emergency has also been escalating among Black Canadian communities [45, 46].

Women and youth who use drugs are also at high risk of experiencing adverse health outcomes associated with substance use, particularly HIV, HCV, and blood borne infections partly due to riskier behaviours and/or early drug use initiation [34, 47-50]. Sexual minorities (e.g., Lesbian, Gay, Bisexual, Transgender, Queer or Questioning + [LGBTQ+]) are also at greater risk for earlier substance use initiation and SUDs than heterosexual populations [51, 52].

1.1.2 People who use drugs and structural vulnerability

The World Health Organization defines the social determinants of health (SDH) as “the conditions in which people are born, grow, live, work and age” (para. 1) (e.g., physical and social environments and the distribution of material and social resources) [53]. The concept of structural vulnerability extends SDH scholarship by acknowledging how individuals and populations interact with political, socioeconomic, and cultural hierarchies [54, 55]. Structural vulnerability is closely related to structural violence. Structural violence describes the social arrangements (e.g., gender, race, poverty) that put people in the line of harm by way of structural and institutional forces [56]. Structural vulnerability can be viewed as the manifestation of structural violence [54-56] and can help explain how economic and social vulnerabilities magnify the risk of drug-related harm for various subsections of PWUD [57]. Intersecting health and social inequities stemming from (but not limited to) criminalization, gender and sexual orientation, racialization and colonialization, socioeconomic status, occupational opportunities,

and unstable housing and homelessness have been well established in creating and sustaining structural vulnerability of PWUD [55, 58, 59]. These structural vulnerabilities oppress and intensify disparities amongst PWUD by constraining their ability to take measures to promote and protect their health and limit equitable access to health and social services [55].

Criminalization. Canadian drug policy has historically been dominated by prohibition of illegal drugs and the criminalization of PWUD [60]. The prohibition of drugs in Canada was not based on evidence of harms resulting from substances, but rather in racialized moral panic over non-British immigration [61, 62]. For example, the criminalization of opium (e.g., *Opium Act* in 1908) was a response to Chinese immigration [61, 62]. The criminalization of cocaine and cannabis experienced similar historical dynamics, linked to Caribbean immigration [61, 62]. These anti-immigrant sentiments and resulting prohibitive policies were a response to perceived threats against Canada's white bourgeois moral order in an effort to maintain British and colonial immigrant economic opportunities [61, 62]. Prohibition and criminalization have been ineffective in controlling illegal drug use and have resulted in an overrepresentation of PWUD, particularly BIPOC PWUD, in the Canadian justice system [63-65].

The legal and social contexts that frame the lives of PWUD influence their 'risk environment'. Rhodes (2009) articulated the risk environment as "drug harms as a product of the social situations and environments in which individuals participate" (pg. 193) [58]. In order to navigate high-risk environments, structurally vulnerable PWUD have to navigate moral and power inequities to generate income (e.g., sex work, criminal activity) and/or obtain illegal drugs (e.g., negotiating with people who sell drugs) [58, 59, 62, 66]. This can lead to elevated exposure to physical violence [67]. Exposure to physical violence has been linked to drug-related harms

(e.g., needle sharing, rushed consumption) [68, 69] and entry into sex work or selling drugs [70], further propagating risks of violence.

Gender and sexual orientation. Gendered power inequities position women into a socially oppressed category relative to men, often creating dependence upon men for social, material, and physical support or protection [71]. LGBTQ+ PWUD are at particular risk of structural violence and social marginalization due to extreme discrimination and stigmatization [72, 73]. Sex work and structural violence have both been shown to increase risk behavior in response to social oppression, subjectification, and restricted agency [74]. Resulting strategies to reduce the harms associated with drug use are often balanced against other priorities deemed more urgent, such as evaluating interactions (e.g., with people who sell drugs, sex work clients or partners) for safety, avoiding assault, and securing money and shelter [75]. The efforts taken to facilitate survival may contradictorily hinder the ability of PWUD to mitigate harms associated with illegal drug use [71, 76].

Racialization and colonization. Social exclusion manifests through forms of oppression that marginalize certain groups of people [77]. Current structures and institutions (e.g. political, social, and cultural) within Canada have maintained the marginalization of BIPOC populations and contributes to harm associated with trauma, abuse, social exclusion, and racialization [35, 61, 78]. For example, intergenerational trauma from historical processes (e.g., residential schools, the Sixties Scoop) as well as current institutions (e.g., child protective services, foster care systems) have long-lasting deleterious psychological, emotional, and physiological outcomes for Indigenous Peoples in Canada [79, 80]. As a result, Indigenous Peoples in Canada experience disproportionate economic disadvantage [81, 82]. Moreover, BIPOC communities experience high structural violence, incarceration rates, and over-policing [35, 61, 79]. For

example, although Black Canadians only comprised 2.5% of the overall population in 2010-2011, Black Canadians accounted for 9% of the federal prison population [65]. Overall, BIPOC populations experience cycles of violence and socioeconomic disparities [35, 83, 84].

Socioeconomic status. Residents of communities with low socioeconomic status experience inequities in institutions and social structures (e.g., schools and policing), as well as physical resources (e.g., housing and employment opportunities) that promote social exclusion and relative deprivation [85, 86]. Residents of socioeconomically disadvantaged neighbourhoods are at an increased risk of initiating drug use given increased burden of psychological distress and social stressors [87]. Other factors that increase drug use initiation or worsen drug-related harms in lower socioeconomic areas include: targeted marketing of alcohol [88, 89]; higher number of drug-related crimes and proximity to illegal markets [90]; adverse life events, particularly in childhood [91]; and recurrent stigma and/or discrimination [92].

Occupational opportunities. The circumstances of PWUD can make already limited employment opportunities more difficult to secure or maintain [93, 94]. Employers are less likely to hire individuals living with or recovering from substance use (e.g., due to stigma, criminalization) [95, 96]. When employment is obtained, people struggling with substance use are more likely to exhibit increased absenteeism at work and reduced productivity, which can further negatively impact their vocational opportunities [97, 98]. PWUD may delay or circumvent employee benefits for help with problematic substance use [99] due to fear and risk of termination, suspension, and other punitive actions [98]. Further, substance use is often an exclusion criterion for income assistance policies in many jurisdictions [100, 101].

Unstable housing and homelessness. Unstable housing and homelessness are closely intertwined with socio-political factors including food insecurity, entrenched poverty, and drug

criminalization, which in combination reinforce structural vulnerability among people experiencing homelessness [102-105]. People experiencing homelessness may use drugs in an attempt to mitigate structural vulnerabilities. For example, using drugs while homeless may suppress hunger, avoid victimization at night by extending waking hours, and provide temporary relief from physical and emotional pain [106]. Compared to other low-income individuals, people experiencing unstable housing or homelessness have higher rates of substance use [107, 108]. Conversely, PWUD are often more vulnerable to homelessness and/or unstable housing due to additional barriers in obtaining shelter, housing, and employment opportunities due to their substance use [109]. Lack of shelter and/or housing further exacerbates unemployment for people experiencing homelessness. For example, employment is often contingent on proof of residence [110].

The criminalization of homelessness further increases structural vulnerability [111]. Policies have responded to the visible ‘inconvenience’ of homelessness by restricting the rights of people experiencing homelessness to occupy public spaces [112]. For instance, several provinces and municipalities have enacted legislation that criminalize income generating activities of this population (e.g., washing car windows, panhandling) [113-115]. People experiencing homelessness often use drugs in public. Public drug use is more likely to be rushed, and as a result PWUD adopt unsafe drug use practices (e.g., reuse and sharing of supplies, unsterile environments) [116-118]. Moreover, fear associated with police presence has been shown to decrease the time between purchasing and consuming drugs in an effort to consume drugs before they are confiscated [119-121].

Intersectionality and structural vulnerability. While criminalization, gender and sexual orientation, racialization and colonialization, socioeconomic status, occupational

opportunities, and unstable housing and homelessness have been described distinctly here, structural vulnerability is often the manifestation of intersecting social categories. Intersectionality theory emphasizes that social categories are not independent and unidimensional but rather multiple, interdependent, and mutually constitutive [122-124]. Intersectionality was rooted in Black feminist scholarship by Crenshaw (1991) and further extended to public health by others such as Bowleg (2012) and Bauer (2014). Central to intersectionality is that multiple social categories at the micro-level (e.g., race, gender, socioeconomic status) are linked to macro- and structural-level inequities (e.g., racism, sexism, poverty) [123]. PWUD are often positioned within multiple disadvantaged categories (e.g., racial and sexual minorities) that create and reinforce structural vulnerability [16]. For example, PWUD who have intersecting identities of racial minority *and* sexual minority have greater risks of substance use and drug-related harm than PWUD who identify as only a racial minority or only a sexual minority [51, 125].

Taken together, many drug-related harms stem from structural vulnerability and multiple social inequities rather than substances themselves. Ramifications of socio-political factors create and maintain structural vulnerability of PWUD and ultimately exacerbate the health and social harms to PWUD through social control and oppression.

1.1.3 Structural competency among health, social, and policy professionals

Health and social service providers as well as policy actors are increasingly acknowledging structural factors that produce health disparities [55]. Most research on structural vulnerability has focused on trying to understand *how* structural vulnerability produces health disparities [58, 67, 74] as well as *how* structurally vulnerable PWUD perceive and experience health and social service provision [57, 126-128]. While this work has been

useful for characterizing health and social inequities faced by PWUD, the degree to which health, social, and policy professionals address or perceive structural vulnerability within their work remains unclear.

Health, social, and policy professionals act as structural forces themselves. These professionals shape the services and policies that affect the lives of PWUD, and make decisions that can either mitigate or exacerbate structural vulnerability. Service providers adopting individual-level views on illegal drug use tend to treat patients “primarily in a psychological, social, cultural, and class vacuum” (pg. 344) [129]. Individualized views on substance use favours behaviour modification strategies (e.g., through personal risk-reduction efforts, stigma, or informal sanctions) [129, 130]. Focusing on individual behavioral factors creates potential health-related ‘deservingness’ which implicitly or explicitly appraises which populations are ‘worth’ time and effort [131, 132]. This can cause service providers to hold perceptions about which patients are likely to ‘do well’. People in deprived circumstances are more likely to engage in behaviours deemed ‘unhealthy’ and are therefore often perceived unlikely to ‘do well’ in health promoting strategies [133]. Adopting a structural approach, on the other hand, creates potential to counter stigmatized narratives of poverty, substance use, and cultural subordination by acknowledging that health outcomes are shaped by larger structural forces [55, 129, 134].

A growing body of literature has called for professionals to develop structural competency to increase awareness of how structural issues influence individual and population health and increase skills to address these issues in practice [55, 135-137]. Structural competency builds upon cultural competency. Cultural competency is an approach that acknowledges that race, social class, and ability, among others, shape interactions between

providers and patients [138]. While cultural competency aims to acknowledge provider bias and improve provider-patient communication, structural competency is “the ability for health professionals to recognize and respond with self-reflexive humility and community engagement to the ways negative health outcomes and lifestyle practices are shaped by larger socioeconomic, cultural, political, and economic forces” (pg. 17) [55]. Structural competency includes five core competencies [137]: 1) recognition of structures that shape clinical interactions (e.g., how factors outside services impact health); 2) development of structured language (e.g., how structure impacts health); 3) articulation of socio-political factors in structural terms (e.g., the impact of social and economic issues that impede service provision); 4) acknowledgement of structural interventions (e.g., structural factors that impact health can be addressed); and 5) development of structural humility (e.g., limitations of structural competency).

Understanding how professionals perceive structural vulnerability may be a first step in building structural competency. Only a handful of studies have examined the perspectives of professionals in how they interpret structural factors when providing clinical services to structurally vulnerable PWUD [135, 139, 140]. These studies documented an acknowledgement of structural barriers (e.g., institutional, poverty, cultural, and political factors) in care provision [139]; structural vulnerability in the production of trauma [135]; and the complex interplay between structural and individual factors in explaining detrimental behaviors [140]. However, it is unclear how professionals act upon these structural factors in an effort to mitigate underlying inequities. More surprisingly, there has been almost no research on how policy actors perceive structural vulnerability. This is concerning given the documented impact of drug policy on structural vulnerability. One notable exception is a

qualitative study, which found that Australian policy actors acknowledged that SDH needs to be considered as part of drug policy; however, it remained unclear how to effectively do so through policy [141].

Deeper investigation on how clinicians and policy actors understand and incorporate structural vulnerability within their work may facilitate bridging the gap between literature documenting structural vulnerability [55, 58, 67, 74, 142] to the implementation of clinical and political strategies and interventions targeting structural factors. Understanding how structural vulnerability is perceived and acted upon in clinical and policy settings may help counteract punitive actions that restrict access to health, social, and substance use care for structurally vulnerable PWUD. As such, the overarching purpose of this thesis was to explore structural vulnerability at the clinical- and policy-level through the perspectives of social care providers and policy actors in order to facilitate recommendations on how services and policies could better address structural conditions for PWUD.

1.1.4 Acute care and structural vulnerability

Almost 18% of acute care hospital admissions are attributed to substance use in Canada [143]. In total, all harms associated with substance use contribute to 2 million days in hospital in Canada each year [144]. Hospitalized patients who use drugs are more likely than other patients to experience homelessness [145-148], attribute their acute care visits to substance use [149, 150], and report acute care as their primary source of medical care [147, 151]. Structurally vulnerable patients often use acute care services as opposed to community and primary care services [152-154]. This is typically a response to structural barriers to access, such as geographical and financial accessibility, lack of continuity of care, and the need to prioritize other immediate needs [155, 156]. Structurally vulnerable patients often delay help-seeking until

acute conditions are developed, further prompting presentation to acute care services rather than preventative community services and/or primary care [157].

Structurally vulnerable patients describe the hospital environment as inhospitable [158, 159]. PWUD, particularly those experiencing homelessness or unstable housing, describe feeling judged and unwelcomed in hospital settings [159-164] and describe surveillance during their hospitalization (e.g., unnecessary searches, confiscation of substances and personal belongings) [158, 165]. Stigmatization and discrimination contribute to suboptimal care for hospitalized PWUD [166-168]. Hospital care providers often have lower regard, less motivation, and dissatisfied feelings working with structurally vulnerable patients who use drugs [158, 166, 169-172]. This often stems from prejudicial attitudes, including the perception that structurally vulnerable patients who use drugs are violent, manipulative, deceiving, drug-seeking, and poorly motivated or apathetic in their life circumstances [166, 169, 170, 173-177]. As a result, these patients are likely to experience poor quality care, be involuntarily discharged or leave against medical advice, have frequent admissions in hospital for lengthy and costly stays, and decreased help seeking behaviours [158, 178-183].

Traditionally, acute care hospitals have been orientated around providing short term, medically necessary treatment. While this may meet patients' immediate medical needs, underlying factors including SDH and structural vulnerability are typically not addressed [184, 185]. Structurally vulnerable PWUD often present to acute care with unmet health and social needs (e.g., substance use and mental health services) as well as basic material needs (e.g., food, shelter, safety, income) [145, 186-190]. Moreover, this patient population has reported interest in accessing acute care to support their unmet needs, including assistance with housing and booking follow-up appointments [191, 192]. Acute care providers have also expressed frustrations that

structurally vulnerable PWUD present to acute care because their basic needs have not been met and utilize acute care as a temporary solution to housing insecurity [193-195].

Beyond acute care presentations, inpatient admissions to the hospital also have a social basis. Approximately 12-20% of general inpatient stays are complicated by economic and social barriers to discharge (e.g., delays in securing social service assistance, difficulty finding or financing appropriate housing placements) rather than medical reasons [196, 197]. Likewise, the length of stay in acute care hospitals is also associated with social factors. For example, high psychosocial severity is associated with increased length of stay in these facilities [198-200] and is further complicated by homelessness [201, 202]. Surprisingly little research has examined the social needs among hospitalized patients who use drugs. However, one qualitative study described that patients experiencing SUDs felt that efforts to improve substance use may be pointless unless hospitalization addressed their basic social needs [203]. Most concerning, perhaps, inpatients experiencing homelessness and/or unstable housing are frequently discharged without having their basic housing needs met. They are often discharged back to emergency shelters or onto the street, further compounding inequities [204-206].

The traditional biomedical model of hospital care has been criticized for its failure to adequately factor in the effect of the broader environment on health, and underestimating the potential role for addressing social needs in acute care settings [151, 184, 207-209]. Addressing social needs within acute care can reduce health system costs and strain on hospital capacity by increasing efficiency, preventing admissions, and improving discharge processes and outcomes [210-213]. Increasing attention on SDH within hospital settings has been described as a promising approach to address health inequities and reduce acute care utilization [212, 214-216].

The integration of formal social supports into acute care is one strategy that has the potential to better support the broader material needs of patients.

Formal social supports within acute care are often provided by social care providers [215, 217, 218]. While medical service providers (e.g., nurses, physicians) may have some formal training on psychosocial care, their role is typically focused on addressing biomedical conditions. Social care providers on the other hand have specialized training and/or intimate knowledge on addressing social problems and challenging social injustices [218, 219]. Various complementary acute care roles comprise social care providers including social workers, transition coordinators, and peer support workers. Hospital social workers provide care coordination (e.g., mental health services, substance use and crisis counseling) and help patients access social services (e.g., disability supports, health benefits, shelter and other basic needs, and housing and income assistance) [194, 214, 218, 220]. Transition coordinators also assist with these components, but focus specifically on post-discharge plans in an effort to prevent adverse outcomes [221]. Peer support workers, who are individuals who have lived experience and experiential knowledge, facilitate rapport to help patients shape their own care and provide nonclinical assistance to support patient goals [222-224]. Together, social care providers assist the most complicated cases (e.g., patients with multiple comorbidities and/or low psychosocial functioning) [194, 220, 225]. However, hospital social care remains an understudied area of acute care services [220, 226]. Extant literature largely focuses on social care provision with a wide range of patients within various hospital settings [215, 218, 219, 227, 228].

Literature regarding social care provision specifically for structurally vulnerable hospital patients who use drugs is also limited. Where data are available, the number of structurally vulnerable acute care patients who are offered or receive social care provision is low [229-231].

One study estimated that amongst people who use illegal opioids frequently, fewer than 10% were offered or provided social services during their hospitalization [231]. Blondell et al. (2008) reported that among patients hospitalized for medical detoxification, only 19% received peer support [229] and Murphy et al. (2009) found that only 30% of PWUD receive social care services in hospital [231]. A retrospective survey of patients hospitalized for injection drug use with infective endocarditis found that during their first admission, 86% received social work consultation. However, of those readmitted, only half were referred for follow-up social work consultation [232]. Moreover, Moore et al. (2016) found that hospital social care providers provide mainly mental health services and care coordination rather than material support (e.g., clothing, transportation services) or other referrals (e.g., shelters, community resources) [220]. Limited social care provision for this patient population is concerning given that social supports provided during hospitalization can decrease admissions, shorten length of stay, and improve post-discharge outcomes [233, 234]. For example, securing housing after discharge has been associated with decreased health service utilization and substance use [234].

Several factors may explain limited social care provision for structurally vulnerable patients within acute care, operating at the macro- (socio-political), meso- (local healthcare system), and micro- (clinical) levels [194]. At the macro-level, social hierarchies within the traditional medical model can create strain and disagreement between hospital social care providers and other staff (e.g., nurses, physicians) which can limit: 1) who social care providers see in hospital; and 2) the quality of care provided to patients [184, 235-238]. At the meso-level, the hospital environment is often not equipped with resources or community connections to support social care, and patient needs are expected to be addressed within short timeframes [215, 226]. At the micro-level, social care providers are often subjected to unrealistic expectations at

the practice level to “fix” or contain entrenched systemic issues (e.g. homelessness, poverty, substance use) leading to burn out and apathetic care [194].

1.1.4.1 Study 1 rationale and objectives

While current literature demonstrates the social needs of acute care patients and the need for social service provision within hospital, the majority has focused on general acute care patients [194, 199, 214] and those experiencing homelessness specifically [177, 239-241] *or* substance use specifically [203, 242, 243]. This is concerning given the high rates of co-occurring substance use and homelessness and/or unstable housing within acute care [244, 245], and ultimately neglects the unique circumstances of patients with intersecting social needs. In addition, literature regarding social care within acute care often combines the perspectives of social (e.g., social workers) and medical (e.g., physicians, nurses) service providers [177, 228, 235, 237, 239, 242] despite differences in their level of involvement in social care provision. Moreover, the perspectives of other social care providers (e.g., peer support workers, transition coordinators) in providing social care to structurally vulnerable patients are missing from the literature. This is surprising given their active role in social care provision, and limits holistic understanding of social care delivery. Finally, literature is heavily focused on emergency department settings [145, 151, 186, 187, 189, 193, 194, 220, 226]. However, inpatient units may be a more effective point of engagement for addressing social needs given lengthier stays compared to relatively brief emergency department encounters. This lack of evidence hinders efforts to improve social outcomes and break structural vulnerability cycles for PWUD and experiencing homelessness.

Study 1 aimed to explore how social care is provided to acute care patients who use drugs and are experiencing homelessness and/or unstable housing. Specifically, Study 1 sought to

understand the perspectives of social care providers on the factors that hinder or enable social care provision for this patient population as well as potential solutions they believed would improve the social care of these patients. Two research questions for this qualitative study addressed this aim:

1. What are the barriers and facilitators in providing social care for patients who use drugs and are homeless and/or unstably housed in acute care?
2. How can acute care hospitals and the broader healthcare system better address the social needs of this population?

1.1.5 Harm reduction and structural vulnerability

Harm reduction is *both* a philosophy and set of pragmatic grassroots and political strategies that aim to reduce negative outcomes associated with drug use, drug policies, and drug laws (e.g., health, social, and legal impacts) without requiring abstinence. According to Harm Reduction International (2021), harm reduction is grounded in four principles and three goals [246]. The principles of harm reduction are: 1) *respecting human rights* (treating PWUD with dignity, respect, and compassion); 2) *commitment to evidence* (harm reduction is informed by a strong body of evidence); 3) *commitment to social justice* (ensuring discrimination does not exclude PWUD from health and social services); and 4) *avoiding stigma* (accepting PWUD as they are without judgement). The goals of harm reduction are: 1) *keeping PWUD alive* (keeping PWUD alive is the most urgent priority followed by reinforcing positive changes, no matter how small); 2) *reducing harms from drug laws and policies* (challenging laws, policies, and law enforcement practices that contribute to drug-related harm); and 3) *offering alternative approaches to abstinence-based treatment* (abstinence from drug use is not imposed or regarded as the only option). Though its roots extend at least as far back as the 1900s, contemporary harm

reduction rose in prominence in the 1980s, aligning with the emergence of ‘new public health’ principles [247]. New public health recognizes the interdependency of health, emphasizes the need to address SDH, and seeks to balance health and social services through population-based prevention and promotion interventions [248].

Harm reduction as a strategy has been widely endorsed by the World Health Organization (WHO) [249] and the United Nations (UN) [250]. In Canada, harm reduction is one of four official policy responses to addressing drug use along with prevention, treatment, and enforcement under Health Canada’s Canadian Drugs and Substances Strategy [251]. Canadian harm reduction providers offer a variety of interventions for the prevention, treatment, and care of PWUD including, but not limited to: supervised consumption services, sterile supplies for drug consumption, overdose prevention programs, naloxone kits, drug checking, safer supply pilot programs, information on safer drug use, and non-abstinence-based housing initiatives [246]. There is considerable evidence that harm reduction strategies are effective in reducing harms and risks associated with drug use including communicable disease transmission, overdose mortality and morbidity, public drug use and other public disorder, and successfully connecting PWUD with health and social services [252-256]. Moreover, literature supports the overall cost-effectiveness of harm reduction programming [257, 258]. However, harm reduction strategies “are insufficient to address underlying social conditions that produce inequities” (pg. 6) [259].

Harm reduction as a philosophy of care attempts to shift the culture from typical stigmatized narratives and care for PWUD, to building relationships with respect well as recognition and efforts to alleviate the multiple structural vulnerabilities faced by PWUD [259-261]. Originally, harm reduction emphasized a philosophy of care through grassroots practices,

including advocating against criminalization and broader structural changes (e.g., legalization of all classes of drugs and sex work, housing as a basic human right), along with illegally distributing sterile syringes by PWUD, front line workers, and activists [262-264]. Public health organizations began adopting harm reduction strategies as a pragmatic approach for reducing HIV transmission during the 1980s HIV/AIDS epidemic [265, 266]. As harm reduction continued to grow through the 1980s and 1990s the approach became increasingly institutionalized and medicalized as a top down policy rather than a bottom up movement, often removing the control from the communities who developed and continue to access harm reduction services [262, 264, 266, 267].

Despite continued efforts of PWUD, front line workers, and activists pressing harm reduction as a philosophy for broader structural change [268-270], harm reduction is often framed as a set of narrow of strategies for promoting individual risk reduction. The pragmatics of harm reduction, especially those that are institutionalized, have largely focused on the encouragement of PWUD to “take responsibility for the care of their bodies and to limit their potential to harm” (pg. 361) through numerous preventative actions [271]. For example, PWUD are educated and instructed to: not share needles, use clean supplies, follow sterile drug use techniques, test their drugs, limit dosage, never use alone, avoid mixing substances, and practice safer sex [272-275].

Critics have questioned the extent to which contemporary harm reduction policies, which largely focus on preventative actions, have balanced protecting the rights of PWUD and promoting public health. Many have argued institutionalization and medicalization has reinforced individual risk reduction, masking health inequities that contribute to illegal drug use and related harm [259, 264, 274, 276-280]. Others contend that these limited representations of

harm reduction that ignore or downplay harm reduction as a philosophy of care further marginalize drug-using populations and communities [259, 281]. As a result, harm reduction focused on individual-level risk reduction has been described as “a partial rather than comprehensive approach to reducing the harms associated with multiple inequities” (pg. 6) [259]. For instance, in many settings, contemporary harm reduction has achieved limited success in addressing structural vulnerabilities such as countering racialized policing [282], securing employment opportunities for PWUD [110], or ending homelessness and the continued criminalization and stigmatization of PWUD [60, 111, 260, 283]. In response to these criticisms, many have called for greater emphasis on human rights in drug policy and a refocusing of harm reduction policy and practice towards addressing structural factors that contribute to patterns of drug use and drug-related harm [267, 278].

The expressed or implicit emphasis on personal risk reduction in harm reduction strategies may be a result of political expediency by governments in response to emerging epidemics (e.g., communicable diseases [253], overdoses [284]). Individual-level risk reduction strategies tend to be less controversial than proposals for progressive drug policy reform (e.g., legal regulation with consumer protection/quality control) [285, 286] and harm reduction continues to demonstrate effectiveness in mitigating some of the harms of illegal drug use for individuals and populations (e.g. HIV, HCV) [253, 287]. However, despite rapid expansion of harm reduction strategies [288], official support for harm reduction has ebbed and flowed depending on upon political authority and prevailing ideologies [289, 290]. Conservative views on drug policy stress that harm reduction will undermine illegal drug control, while more liberal views see harm reduction as an opportunity for structural policy reform [290]. Contested policy often carries symbolic value in which evidence may be undermined [291, 292]. Even in the face

of established evidence of the benefits of harm reduction, harm reduction strategies continue to be a contested area of ‘morality policy’ [289, 293, 294] and straddle the line of illegality-legality. For example, needle exchange programs and supervised consumption services required extensive advocacy that they were beneficial in reducing drug-related harms (e.g., HIV/AIDS, overdose) by PWUD, families, academics, and select politicians before they were officially sanctioned [295, 296]. These movements have been described by Baker et al. (2020) as ‘non-elite’ policy actors (i.e., those occupying community, organization, and individual roles) driving ‘elite’ policy actors (i.e., those occupying formal public policy roles) into making formal harm reduction policy [297].

Taken together, harm reduction has been limited to pragmatic responses to drug use, restraining its full potential. Institutionalization, medicalization, and political opposition has generally situated harm reduction as a narrow set of individual-level risk reduction strategies, rather than a vehicle to mitigate the underlying social inequities that make PWUD at risk for drug-related harm as originally intended.

1.1.5.1 Study 2 rationale and objectives

Current literature indicates that harm reduction strategies focused on reducing individual harms of drug use are ultimately insufficient for addressing health and social inequities if structural factors are not also alleviated. While research has documented the efforts of some policy actors and activists (i.e., PWUD, frontline harm reduction workers) in advocating for structural changes to improve the health of PWUD [268-270], almost no research has explored policy actors’ views on harm reduction philosophy or understanding of the role of drug policy in creating or influencing the material conditions in which PWUD live. Study 2 sought to explore how structural vulnerability is situated within discourses of harm reduction and policymaking for

illegal drugs. Specifically, study 2 aimed to understand the perspectives of Canadian policy actors on how they understand structural vulnerability of PWUD and whether they identify a need to better address structural vulnerability within harm reduction and policymaking for illegal drugs. Two research questions for this qualitative study addressed this aim:

1. To what extent is structural vulnerability identified and discussed in relation to harm reduction and policymaking for illegal drugs in Canada?
2. If identified, what solutions do policy actors propose for addressing structural vulnerability amongst PWUD and what efforts have they undertaken to advance formal policy change in this area?

1.2 Overarching approach

Critical realism underpins the research presented in this thesis. Critical realism asserts that reality exists and operates regardless of one's knowledge or awareness of it [298, 299]. Critical realism derives from a particular paradigm, including ontology (i.e., a patterned set of assumptions concerning reality), epistemology (i.e., knowledge of that reality), and methodology (i.e., the particular ways of knowing that reality) [300]. Critical realism retains components of both positivist and constructionist paradigms [298]. It retains the realist ontology of positivism which posits that "there is a real world that exists independently of our perceptions, theories, and constructions" (pg. 5) [301], but also accepts the relativist ontology of constructionism which asserts that "our understanding of this world is inevitably a construction from our own perspectives and standpoint" (pg. 5) [301]. Critical realism further acknowledges that social and structural factors are produced and reproduced through practices, policies, and actions. Although critical realism acknowledges that these factors are often historically rooted, they are subject to transformation [302]. In this way, critical realism is well suited to explore the complex and

dynamic relationship between substance use, social services, acute care, and harm reduction as they are shaped by social conventions and policies. Moreover, while these relationships are rooted in historical processes, political responses continue to evolve, shaping experiences and expectations of PWUD. Finally, critical realism is ideal to explain social structures and suggest practical policy recommendations to address social problems [298].

1.3 Thesis structure

The remainder of this thesis includes Chapters 2 to 4. Chapters 2 and 3 detail the analyses of two qualitative datasets in manuscript form. Chapter 2 outlines the first study of this thesis, which analyzed interviews exploring the perspectives of social care providers in providing care for structurally vulnerable patients who use drugs and are experiencing homelessness and/or unstable housing. Chapter 3 describes the second study, which analyzed policy actors' views on structural vulnerability in harm reduction and policymaking for illegal drugs, based on interview data collected as part of the Canadian Harm Reduction Policy Project. The concluding chapter synthesizes the thesis findings as a whole, describes its clinical and policy importance, and provides areas for future research.

Chapter 2: “Sometimes, I honestly feel hopeless”: Social care providers’ perspectives on caring for structurally vulnerable patients who use drugs

2.1 Introduction

Structural vulnerability is the manifestation of intersecting political, socioeconomic, and cultural hierarchies that impact the health of individuals and populations [54, 55]. People who use drugs (PWUD) are often structurally vulnerable due to severe socio-political disparities that amplify stigmatization, discrimination, and cultural oppression. Patients who use drugs and are structurally vulnerable, particularly those experiencing unstable housing and/or homelessness, disproportionately access acute care more than the general public [303, 304]. Hospitalized patients who use drugs are more likely than other hospitalized patients to experience homelessness and report acute care as their primary point of healthcare access [145, 151]. Structurally vulnerable patients often rely on acute care more often for several reasons, including access barriers (e.g., no identification, health insurance), lack of primary care continuity, and/or prior experiences of stigma and discrimination in healthcare settings [155, 305]. Negative experiences and difficulties in accessing health systems can result in delayed care seeking until health conditions require urgent medical attention, often reinforcing acute care as the most accessible and convenient option for addressing medical needs [144, 157].

Conventionally, hospitals provide short-term diagnostic assessment and acute medical treatment. Although structurally vulnerable patients often present to acute care with unmet social and material needs (e.g., inadequate housing, food insecurity, unemployment, safety concerns, difficulty affording basic needs) [186, 191], it is rare that these social determinants of health (SDH) are adequately addressed during hospitalization [145, 306, 307]. Instead, structurally vulnerable patients are frequently discharged back to emergency shelters or onto the street,

further compounding health inequities [204]. This is concerning because connecting these patients with social supports can significantly improve post-discharge outcomes, decrease admissions, and shorten the length of hospital stays [233]. Provision of housing alone after discharge is associated with decreased substance use and health service utilization [234].

The integration of formal social supports into acute care settings is one potential strategy to address the broader material needs and health outcomes of patients. However, hospital staff have identified several barriers to providing social care, including limited resources, lack of healthcare coordination, hierarchies within the hospital, and pressures to discharge [194, 308, 309]. Little research has addressed how to respond to barriers impeding the delivery of hospital social care in hospitals [226], and extant studies focus on the perspectives of social workers. The views of other professionals who provide social care (e.g., peer support workers, transition coordinators) have received little attention, resulting in a narrow perspective on social care delivery within acute care. There is also limited literature regarding effective social care provision specific to structurally vulnerable patients who use drugs. The majority of extant research examines social care for general acute care patients [194, 199, 214], or for those experiencing homelessness [177, 239-241] *or* those who use drugs [203, 242, 243], exclusively. This is problematic given the high prevalence of substance use amongst homeless and unstably housed populations [244, 245] and the unique challenges in supporting this patient population effectively.

While social care providers in acute care hospitals have specialized training to help meet basic and complex needs of patients, they receive little guidance on how to care for patients who use drugs [310] or those experiencing homelessness [311], let alone patients experiencing both substance use *and* homelessness. Patients who use drugs and experience homelessness report

feeling judged and unwelcomed within hospital settings, and describe futility in the care they are provided due a lack of compassion and adequate care [161-163]. Hospitals also often enforce formal or informal bans on illegal substance use [158, 312]. As a result, patients can hesitate to disclose their housing status or substance use [172, 176, 313]. Nondisclosure leaves these important aspects of health neglected, while disclosure can lead to stigmatized clinical encounters [172, 176, 313]. Further, structurally vulnerable patients who use drugs are often excluded from community social supports (e.g., housing and income supports) as some policies do not recognize substance use as a long-term disability [314-316]. Effective care for this patient population requires tailored and coordinated interventions that address both housing and substance use simultaneously [317, 318]. We explored the perspectives of social care providers in an urban acute care hospital on the barriers and facilitators they face in providing effective support to patients who use drugs and experience homelessness and/or unstable housing. Our overall aim was to generate knowledge on social care provision that could lead to better social care integration within acute care to improve acute care and outcomes for this patient population.

2.2 Methods

2.2.1 Study design

The research team adopted a focused ethnographic design [319]. While traditional ethnography aims to describe and understand culture, focused ethnography is designed to elicit information on a distinct issue or shared experience within a discrete community, organization, or context and has been widely used to study a variety of healthcare settings [319]. Focused ethnography commonly employs semi-structured interviews and often limits or omits participant observation [319-321]. This method is well-tailored to capturing the perspectives of social care providers on supports required for people seeking acute care for conditions related to substance

use and unstable housing or homelessness, and generating data for program improvement. The study received ethics approval from the University of Alberta Research Ethics Board.

2.2.2 Study setting

The study was conducted at a large, urban acute care hospital located in Edmonton, Canada. While the hospital serves patients from all over Northern and Western Canada, many reside within the local health services catchment of Edmonton-Eastwood. This catchment area is associated with poorer socioeconomic status compared to the provincial average [322], high overdose rates [323], and a disproportionately high number of visits related to substance use compared to other hospitals in Alberta [324].

The hospital offers access to an addiction medicine consult team (AMCT). At the time of the study, the AMCT included addiction medicine physicians, a nurse practitioner, social workers, an addiction counsellor, and peer support workers. The team provides in-hospital consultation services, including specialized pain and withdrawal management, substance use treatment, harm reduction, access to personal identification, and income and housing support [192]. The AMCT works in close collaboration with other positions, including unit social workers and transition coordinators within the hospital, and social workers, peer outreach workers, and homeless transition coordinators in the community to provide social care to structurally vulnerable patients who use drugs.

Social care providers outside of the AMCT (i.e., unit social workers, transition coordinators) work throughout the different areas of the hospital and provide social care, where indicated, to the general patient population. While unit social workers provide a range of social services (e.g., psychosocial assessment, advanced care planning, case management and coordination, discharge planning), unit transition coordinators focus their resources and services

on optimal post-discharge plans in an effort to reduce cost of care and prevent adverse outcomes. Finally, the provincial Department of Community and Social Services employs social care providers who liaise with hospital staff and patients to provide access to client records from across different ministry income support programs. This allows hospital social care providers to check the status of client applications and coordinate documentation for new submissions or re-applications for a variety of short and long-term income and disability support programs.

2.2.3 Data collection and participants

The AMCT helped identify potential participants through personal invitations, flyer distribution, and presentations at hospital staff meetings. Interview participants also referred colleagues who may be interested in participating. Interested individuals provided informed consent prior to commencing the interview in a private location within the hospital. Interviews were audio-recorded, and descriptive and analytic field notes were compiled for each interview to note contextual details and analytical insights by a member of the research team. The interview guide (Appendix A) explored staff experiences providing social services to patients experiencing homelessness and/or unstable housing and use drugs. It also explored staff views on acute social care provision and bridging patients between hospital and community supports. Interviews lasted approximately one hour and were de-identified and transcribed verbatim using pseudonyms for participants.

Sampling focused on maximizing role diversity amongst participants who directly provide social care for patients. A member of the research team conducted 18 semi-structured interviews between August 8, 2018 and January 24, 2019. Participants were social workers (SW; n=8) and other social care providers (SCP; n=10), such as peer support workers and transition coordinators. This ‘other’ category was used to protect participant confidentiality and anonymity

for social care providers occupying otherwise identifiable positions. Participants were affiliated with the AMCT (n=6), the inner-city acute care hospital (n=10), and the Ministry of Community and Social Services (n=2). Determining adequate sample size in qualitative research is ultimately a matter of judgement and experience. Participant recruitment and data collection continued until the research team agreed that the transcripts provided rich, thick data. This was determined by identifying that no new ideas or concepts were emerging from interviews and preliminary analysis showed thematic saturation [325].

2.2.4 Data analysis

We used NVivo 12 to manage the final interview data and field notes. Consistent with focused ethnography, latent content analysis was used to identify, code, and categorize primary patterns in the interview transcripts to develop a preliminary list of codes [319, 321]. Codes were iteratively refined, grouped to form categories based on similarity [321], and revisited based on the socioecological model outlined by McLeroy et al. (1988) to generate themes [326]. The socioecological model by McLeroy et al. (1988) recognizes that public health challenges are often too complex to be adequately understood and addressed from a single level, and emphasizes that health behaviors are a product of individual attributes, social environments, and policy contexts [326, 327]. Specifically, the model considers the complex interplay between individual (e.g., knowledge, attitudes, skills), interpersonal (e.g., families, friends, social networks), organizational (e.g., social institutions, formal and informal rules and regulations), community (e.g., relationships between organizations), and public policy (e.g., local, state, and national laws and policies) features which support and maintain health behaviours [326]. This model is particularly helpful for understanding multiple and interacting determinants of health as well as developing recommendations for multi-level interventions [326, 328]. The

socioecological model facilitated generating new understanding of the barriers, facilitators, and potential solutions for improving social care for structurally vulnerable patients who use drugs across different levels of influence. Our codes were ultimately organized around four of the five context-specific levels within the socioecological model [326, 328]: 1) individual; 2) community; 3) organization; and 4) policy levels of influence. While the individual level typically refers to the individual receiving care personally, this level of influence was adapted to describe how social care providers view individual-level patient barriers to care from their perspectives. The interpersonal level of influence was not prominent in the main findings of our inductive analysis.

Several strategies were used to ensure rigour [329]. Reliability was sought through the generation of a codebook and co-coding, in which a second member of our research team reviewed the codebook, transcripts, and categorization for coherence and accuracy. Special attention was given to negative cases to increase validity by exploring perspectives that contrasted with more commonly occurring perspectives. In addition, the use of an audit trail and field notes facilitated engagement in reflexivity and minimized the chance of bias. Finally, to increase generalizability of the findings, we maximized the diversity of participants to establish a rich and in-depth understanding of social care provision within an acute care setting.

2.3 Results

As shown in Figure 2.1, four main themes emerged from our qualitative analysis, corresponding to levels of the socioecological model [326]. The main themes are described below from micro- to macro-level of influence: 1) individual; 2) organization; 3) community; and 4) policy.

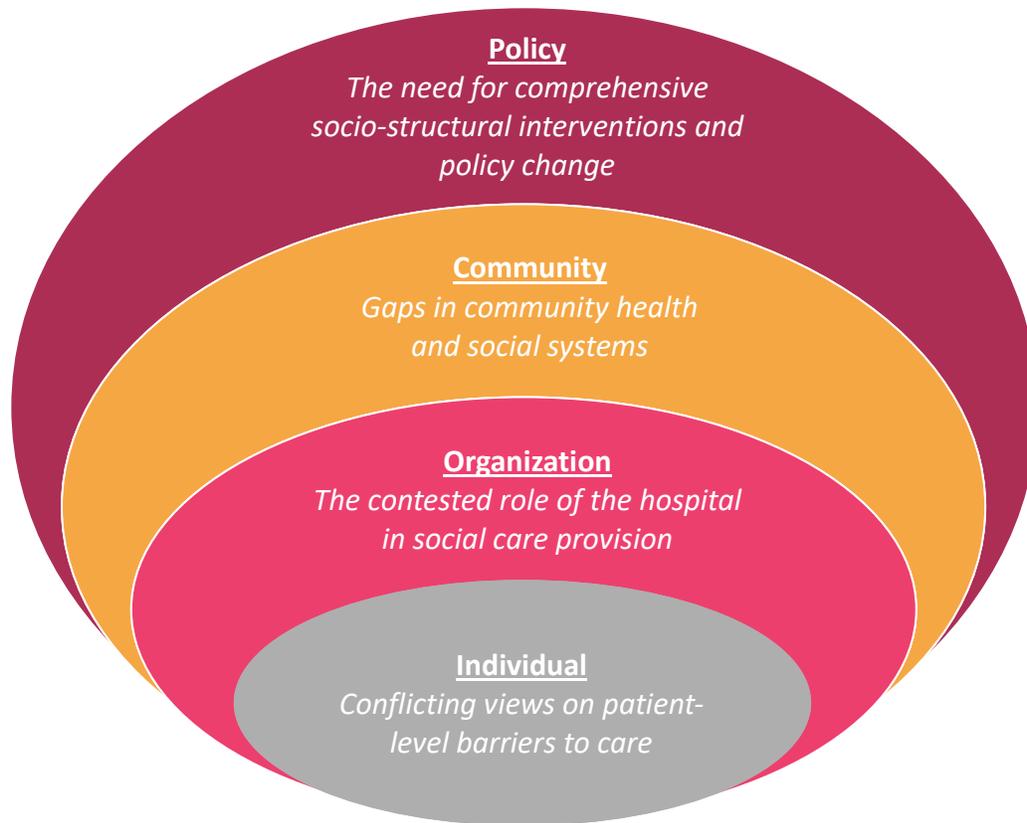


Figure 2.1 Main themes organized within the socioecological model [326] (figure adapted from Barbara et al., 2017 [330]).

2.3.1 “There are people [who] unconsciously or consciously subscribe to an individualist orientation”: Conflicting views on patient-level barriers to care

How social care providers conceptualize patient-level barriers to care determines, in part, their approach to addressing needs in practice. Participants in our sample had divergent views, with most emphasizing deficits in patient motivation as the main factor determining unsuccessful social care provision, and a minority highlighting the centrality of structural factors that impede individual patients’ ability to secure income, housing, and other social supports.

Participants with a more reductionist view on structural vulnerability and substance use attributed challenges in providing care to patients’ internal mental states, suggesting that some

patients “choose” to be homeless, or lack motivation to address their financial circumstances or substance use, and as a result often fail to “follow through” on offers of support. This view was particularly common amongst transition coordinators in our sample. These participants described structurally vulnerable patients who use drugs as “blocking beds” in hospital for others with more “legitimate medical needs,” or as “noncompliant” with care plans or hospital rules. These views were often cited as rationale for discharging patients back into homelessness. Participants voicing a reductionist perspective described doing the bare minimum for patients, e.g. “put a bunch of papers down...here you go let me know if you need any help” [SCP15], or expecting patients to access supports on their own. For example, one participant explained:

At the end of the day, patients make their own decisions and make their own choices. And if they choose not to help themselves, no matter how much stuff you give them it’s not going to be enough, because they’re still not going to do it. [SCP4]

In contrast, other participants described how patients’ ability to follow through with supports was limited by factors outside of patients’ control. Participants voicing this perspective were largely affiliated with the AMCT. Some participants expressed how post-discharge or outpatient follow-up was challenging because other urgent needs such as “where am I getting my next meal, where am I sleeping tonight” [SCP5] often take priority over keeping scheduled appointments. These participants noted that following-up with social supports could be further hindered by a lack of a phone or transportation and the need to continually focus on securing drugs and avoiding withdrawal. One social care provider described that securing adequate social support is typically a long and incremental process which makes it hard for patients to follow up:

[I]f we had more time we could work with them but it’s not that easy, it’s not a quick fix, it’s a long-term fix and a lot of our people are transient, so they don’t come back to their follow-up appointments because you know, their substance [use], so they’re back out there, they’re back out and do their thing...and it depends on how far you are in your [substance use]...you’re telling somebody like okay, you’re on the waiting list for a year. Like, in a year’s time, am I going to care? [SCP18]

Beyond material challenges, participants outlined how patients often find the hospital to be “inhospitable”, describing the pressure to discharge patients who are away from the unit for too long, even when they had logical reasons for leaving (e.g., looking for housing, collecting belongings, income generating activities, consuming substances, interacting with peers). Many participants therefore detailed having to allocate a lot of time advocating for patients to stay in hospital in order to adequately address their social needs. For example, a social worker said:

[T]hey may be off the unit because they’re looking for a place...They may have a [substance use] issue that is bringing them off the unit...I’ve had a lot of people be really worried about their stuff and where they’ve stashed their stuff. And they’ve got to go and move it...going and connecting with their peer group out in the smoke pit or things like that...because they’re plus, plus, off unit they kind of get pushed out...So, we have to try and advocate for them to stay in hospital so we can actually help them. [SW6]

Finally, many participants noted that patients “have had many, many negative interactions with systems” [SW6] which have resulted in a deep mistrust of providers and hospitals:

We create a lot of the behaviours by trying to force these patients into certain groups and it doesn’t work like that...we’re trying to get them to fit in a system that they really don’t want to be part of. They want to...live on their own terms. [SCP3]

The combination of follow-up challenges and the “inhospitable” hospital environment were described as the main reason individual patients “fall through the cracks” [SW7], and ultimately do not get their social needs met.

2.3.2 “If we view health from a medical model, we’re not understanding the social determinants of health”: The contested role of the hospital in social care provision

At the organization level, participants described tensions in providing social care for structurally vulnerable patients given the traditional biomedical approach to acute care. In particular, they discussed the need to frequently turn over available beds and feeling constant

pressure to discharge patients back to homelessness if patients no longer have acute medical needs. As one participant shared:

Traditionally hospitals are based on a very medical model...The old school saying that still you hear sometimes on the units is that we're not here to solve social issues, we're here to solve medical issues...Being homeless is not a medical issue, having no income is not a medical issue so it should not warrant or require that they need to stay in hospital to address this. So, hence, why patients once they're medically stable, are discharged. I think that social issues are addressed if they impact the hospital stay or the hospital discharge. [SW1]

As a result, most participants outlined how they struggled to provide more than “band-aid” approaches to address patients’ social needs, and being able to only “do something really quick, because they’re being discharged in two days” [SW10].

Many participants felt that the hospital cannot ameliorate underlying determinants of substance use and homelessness. A few participants were comfortable with the limited range of social care provided in hospital and felt that hospitals should not be responsible for addressing social needs. However, all participants accepting the biomedical model still acknowledged that without providing adequate social care within the hospital, patients will continue to have adverse health and social outcomes. A social worker told us:

[W]e're talking about systemic issues, right. [S]omeone's not going to come into the hospital and we're going to solve the fact that they were...victims of childhood trauma and now they have [problematic substance use]...And I don't necessarily think that everything needs to be dealt with in an acute care setting. But I think there needs to be some understanding of here's all these other things that are actually impacting their health and if we don't address them in some way...overall their health and their wellbeing as a person is not going to get better. [SW8]

In contrast, many participants stressed that hospitals should be responsible for social care because if “we just look at the medical part we are going to wait for them to come back in another week or two” [SW2]. These participants noted that inequities in health and social care

access in the community can be alleviated through the hospital because admissions provide an opportunity to reach structurally vulnerable patients who otherwise have limited access to care:

I think that there's a population though that comes into the hospital more frequently and this is the one place that it should be best addressed because it's not well addressed anywhere else. [SW9]

Similarly, participants outlined how the hospital provides a relatively stable environment, which creates an opportunity to provide comprehensive social supports. As detailed by a social worker:

It's actually more productive when they're in hospital because they have a safe and stable place that they are staying right now that I can find them when I go up to the unit and be able to make progress while they're in hospital. [SW6]

Others noted that given the entrenched nature of substance use and homelessness, the hospital provides a window to engage patients that otherwise may not be reached. For example, one participant told us:

It's a great time to kind of say here's an opportunity...especially for [substance use]...so sometimes that window of opportunity is really small, and when they hit that window of opportunity in a hospital, if there's an opportunity for housing and all those wrap-around services to kind of capitalize on that opportunity. Some people might say it's a captive audience. [SCP14]

Overall, while some participants felt that acute care was not the appropriate setting to address social needs, most felt that the hospital provides an opportunity to provide both medical and social care to improve outcomes for structurally vulnerable patients who use drugs, especially given structurally vulnerable patients often have limited access to effective care in the community.

2.3.3 "It's almost like they're set up for failure": Gaps in community health and social systems

Participants noted several gaps in community health and social systems that further challenged their ability to care for this patient population. Most participants discussed a lack of

affordable and available housing supports compared to the number of patients in need, resulting in waitlists lasting “close to a year” [SCP4]. Participants noted several other challenges in connecting patients with housing supports, including finding suitable housing, accommodating patient preferences, and patients’ histories with housing supports. Participants outlined how the unique needs of structurally vulnerable patients with current substance use were particularly hard to accommodate within mainstream housing programs. For example, one participant said:

Substance use is a huge issue. Even in some of the lodges, for some of our patients who are homeless, there's only a handful that will take them. Which they're fantastic but any other lodge that finds out that there's substance use, is not likely going to take them...[It's] great to have that [option allowing substance use] but then again, we have a waitlist. [SW8]

Participants further expressed that housing options were restricted for particular groups of structurally vulnerable patients who use drugs, such as women: “Trying to find a...domestic violence women’s shelter who will take somebody with [substance use] issues. I don’t know that that exists” [SW9]. Others described that current shelter and rental housing options for structurally vulnerable patients are typically “rough”, often leaving patients with no viable options. As one participant said:

There are times that because of the existing resources for homeless individuals, and how they're not set up properly, they're not considered safe, they don't have regulations, if you are somebody who is very vulnerable; it's not an ideal place. You have people that will refuse to go to them and would rather sleep in a lean-to in the river valley. Like what does that tell you about the way that we treat [this population]? [SCP15]

Finally, participants noted that restrictive and frequently changing criteria for housing supports are a barrier to successfully placing patients. One participant described this challenge by saying:

[Housing] agency’s criteria always change. So, we have to call the same agencies over and over and over again because we never know. So sometimes you get lucky. And somewhere else will have room or make an exception, but there’s nothing easy. [SW9]

Several gaps in financial supports were also identified. Participants noted that income support benefits were insufficient to cover cost of living, requiring patients to have to “choose between...food...or...shelter.” [SCP15]. Participants further added that “if you have a substance [use] problem on top of that, then how do you pay for that?” [SW8]. Participants also described numerous barriers to obtaining and maintaining income support benefits for patients. For example, participants mentioned a cyclical relationship between needing a current address to apply for income support, and also requiring income support to obtain housing. The contradictory nature of obtaining income support was highlighted by two participants who described:

[They] have to have an address so that we can establish residency [to obtain income support]...that’s the piece for individuals that maybe are experiencing homelessness; they do not have an address. [SCP11]

You have to start with their finances. If I don't want to discharge to the street, finances need to be done because in order to get housing you need income. [SW10]

Other barriers to obtaining and maintaining income support benefits included restrictive and convoluted criteria and payment schedules, and extensive and unrealistic reporting requirements. Convoluted criteria and unrealistic reporting requirements were described as especially challenging for patients experiencing structural vulnerability. For example, one participant said:

[I]t is a lot for people to remember, I mean, my goodness, there are three of us sitting around the table who are educated and articulate and we have a hard time understanding it. So, people with complex needs that are going through [substance use], mental health, trauma, homelessness, whatever it might be, that’s a lot to remember. Even if you’re incredibly...knowledgeable in a lot of different things, when you’re going through a time of crisis, it’s hard to remember those things. [SCP14]

Perhaps most concerning, some participants said that patients residing in shelters are often ineligible for income support, because the provincial government considers their basic needs (e.g., shelter, food) to be met. One participant explained:

The Government...is only responsible for food, shelter, clothing...So, if they're receiving food and shelter at one of our shelters that the province funds already, to provide a [person] money additionally it could be perceived by some as double dipping. [SCP14]

Gaps in community health and social systems, particularly in housing and income support, were seen as creating intense barriers in providing comprehensive and applicable care for structurally vulnerable patients who use drugs and are experiencing homelessness and/or unstable housing, ultimately exacerbating health and social inequities.

2.3.4 “We need to look at this from a very holistic perspective”: The need for comprehensive socio-structural interventions and policy change

Several potential policy changes were suggested by participants to help improve acute care and health and social outcomes for structurally vulnerable patients. Many participants said “we would like to have a Housing First team based out of the [hospital]” [SW6] that “would provide a central access point that would prioritize patients leaving acute care” [SW6]. Housing First programs are non-abstinence-based housing initiatives which provide housing to people as quickly as possible, with no preconditions [331]. Participants described several potential benefits to having an in-hospital Housing First team, including: 1) promoting consistency and continuity of care (e.g., mitigate duplication of service offerings, create an easy point of access for inpatients, increase follow-up capacity, enable progress on housing to be made over multiple hospital admissions and/or ambulatory visits); and 2) facilitating the creation of new specialized housing options for patients who use drugs and have co-occurring health conditions. For example, a social worker told us that a Housing First team could start working with acute care patients immediately and allow for better follow up, especially for vulnerable patients with complex health needs:

A Housing First team...that would be aimed towards a specific population that is more vulnerable, with complex health needs...And then leave a small case load for people that

could be easily housed as well so that we're not missing the whole spectrum right?...there would be an actual team that could go up to the units, grab them and bring them out to look for housing and actually work on that immediately...have that relationship and continue to follow that patient while they're in housing to help them maintain their housing and so on and so forth. [SW1]

Many also described a need for appropriate sub-acute care spaces where patients with social needs and substance use could wait for housing placements, because many existing sub-acute facilities often “refuse...inner-city homeless patients because of behaviours, because of their substance use, because of mental health” [SW8]. Opening a transitional hospital unit or a community-based sub-acute care facility with an explicit substance use or harm reduction mandate was seen as one way to prevent discharging medically complex patients back into homelessness or keeping them in-hospital while they wait for a space. As one participant said:

[I]f someone is really ill, it's hard to find them housing if they're using [substances]...Even though there is housing for people that use. There's harm reduction housing. They're not for people that are also really sick...these are the ones that are stuck in the cracks. [SCP12]

Finally, participants described the need to better identify SDH and substance use within acute care. Not only was this described as a way to enhance existing statistical data on the need for in-hospital Housing First teams and subacute care facilities, but also as a way to identify broader social supports required within acute care and the community. This was particularly important as multi-level interventions addressing broader SDH within existing or proposed housing supports were seen as necessary to better support structurally vulnerable patients who use drugs. Participants told us that multi-level interventions would address personal care skills and social support systems since structurally vulnerable patients who use drugs have often lived in extreme poverty for long durations which may limit their ability to maintain housing or income support. For example, a social worker said:

I am talking about people who...have been so entrenched for so many years that they don't understand how to make a budget, they don't understand how to grocery shop, they don't understand how to meal prep...if you take somebody who's...[used drugs] pretty much most of their life...they have some barriers...come from an unhealthy family system, they don't have supports and then we finally do get them housed...how are they going to function...They're not going to know how to maintain this lifestyle now because they've never been exposed to it. [SW16]

Taken together, more comprehensive policies and interventions were seen as necessary to address medical, income, and substance use needs concurrently.

2.4 Discussion

To our knowledge, this study is the first to explicitly examine social care providers' perspectives on addressing the social needs of patients who use drugs *and* are experiencing homelessness and/or unstable housing within an acute care setting. Specifically, we described the barriers and facilitators to providing social supports for structurally vulnerable patients who use drugs at the individual, organization, community, and policy levels of influence. Our findings highlight tensions regarding the appropriate scope of social care for structurally vulnerable patients who use drugs and also the potential for hospitals to serve a stronger role in social care provision for this patient population.

Participants had divergent views on patient-level barriers that affected social care provision. Similar findings were reported by Fleming et al. (2017) who found that acute care providers grappled with a complex interplay between structural and individual-level factors, sometimes explaining behaviors as a response to structural conditions, and other times as the result of individual choice [140]. Our study adds to this literature and suggests that when caring for structurally vulnerable patients who use drugs, viewing deficits in patient behaviours due to individual factors often results in suboptimal social intervention. PWUD who are experiencing homelessness often have personal histories and social circumstances which require social care

needs to be balanced with limited time and resources [203, 242, 332]. The complexity of patients' structural barriers can result in difficulties in providing compassionate care [194, 333, 334], which may in part explain the varied quality of social care provided to structurally vulnerable patients who use drugs. Participants in our study who were affiliated with the AMCT often held more structural views on patients who use drugs. This may be, in part, because the AMCT routinely provides care for structurally vulnerable patients who use drugs, compared to social care providers outside of the AMCT who provide care to boarder populations in the hospital and may be less knowledgeable on structural barriers. Increasing recognition of external systemic factors that shape substance use and homelessness to boarder groups of social care providers may help counter provider burn out and negative clinical interactions by increasing appreciation for patients' circumstances [129, 134]. It may therefore be beneficial to provide formal structural competency training (i.e., training health professionals to recognize and respond to the impact of upstream, structural factors on patient health) [55, 137] for social care providers, especially for those with a more reductionist view.

The interpersonal level of influence was not prominent in our analysis which could have given insights on patient-social care provider relationships from the perspectives of social care providers. Stigmatization and discrimination by hospital care providers is a structural barrier to care in and of itself and contributes to suboptimal care for hospitalized PWUD [166-168]. It may be plausible that social care providers did not view or want to discuss themselves as a barrier to social care provision for structurally vulnerable patients. This further highlights the need for structural competency training which involves self-introspection of not only external structural barriers, but internalized biases as well [55, 137]. While this type of training

may increase understanding of structural factors and how to practically intervene on them, it is only a partial response to improving the overall care for this patient population.

Our results emphasize that the hospital environment provides an opportunity to provide social care that is often difficult to access and maintain for PWUD. Hospitalization inherently alleviates some of the structural vulnerabilities faced by patients (e.g., shelter, food security) [189, 195] and therefore provides a comparatively secure environment where social needs can be attended to without competing with other patient priorities. In order to take advantage of this secure yet short hospital admission, improvements need to be made to streamline social care provision. Neglecting to identify SDH limits the quality of care provided to patients [184, 235, 237, 238], yet documentation of housing status [240, 241] and substance use [232] in acute care settings is inconsistent. Active case finding and tracking data on SDH or using Bourgois et al.'s (2017) structural vulnerability assessment tool for clinical encounters [55] may be an important first step in legitimizing and strengthening acute care's role in social care provision [335]. Identifying SDH and structural vulnerability should be complimented with broader culture change and care coordination to: 1) reinforce identifying and addressing social needs within acute care; and 2) ensuring that when social needs are identified, they can be effectively acted upon. Doing so may ultimately increase efficiency, prevent admissions, improve successful discharges, and provide cost savings [211, 212, 216].

We found a perceived need to fill gaps in community-based supports, specifically for patients who use drugs and are experiencing homelessness and medical needs. Participants corroborated that community housing programs lack specialized medical care [177, 239]. This is concerning because: 1) discharge is either delayed or patients are turned away by housing supports, resulting in suboptimal health and social outcomes [204, 336]; and 2) substance use is

associated with higher odds of medical illness (e.g., heart disease, gastrointestinal disorders, skin infections, acute respiratory disorders, malignant neoplasms) [337] which require tailored medical care. Our findings suggest that appropriate transitional housing programs, hospital-based Housing First teams, and harm reduction-oriented sub-acute care facilities that care for structurally vulnerable patients who use drugs and have other complex medical needs could alleviate some of the pressure on hospital facilities. Placing patients experiencing homelessness and medical illness into respite transitional housing and then rapidly moving them to permanent supportive housing has shown reductions in emergency department visits and hospital stays [338]. Moreover, a Housing First pilot project that provided integrated medical, psychiatric, and substance use care for people experiencing homelessness, medical illness, and substance use found reductions in acute care utilization, medical respite services, and cost benefits [339]. While this pilot was not hospital-based *per se* it is feasible that hospital-based Housing First teams may increase acute care efficiency as collaboration between Housing First teams and social care providers could occur on site.

Our findings also suggest minimizing the complex and restrictive eligibility criteria of income support policies. Previous research has also found that income support policies function to compound existing structural vulnerabilities and ultimately create avoidable harms [340]. Increasing the amount of income support is also likely to be of benefit, especially since substance use creates additional financial needs beyond food and shelter (e.g., securing illegal drugs). Importantly, our study highlights that while housing and income are necessary social care needs, they are only one component of addressing structural vulnerabilities. Multi-level interventions that address intersecting factors are necessary to improve post-discharge outcomes and reduce admissions. For example, interventions that address other contextual factors (e.g., personal care

skills, social support systems) may help to mitigate structural factors that affect social care provision as well as patient outcomes once discharged and/or housed [341]. Increasing the availability of service models that couple provision of independent housing with on-site and community-based supports for intersecting issues (e.g. supportive housing) may also be effective in improving long-term residential stability and health and social wellbeing [342, 343]. It is imperative that these initiatives ensure that substance-related health needs are addressed (e.g. through harm reduction, treatment and/or other support) along with housing and other structural factors.

2.4.1 Strengths and limitations

To our knowledge, this study is the first to explicitly examine acute care social service providers' perspectives on addressing the social needs of structurally vulnerable patients who use drugs. We applied maximum variation sampling to ensure role diversity amongst participants [344]. As such, this study included a novel mix of participants incorporating the perspectives of social workers, peer support workers, and transition coordinators, ultimately broadening understanding of social care delivery within acute care. These strengths were critical as the study was concerned with social care providers describing their experiences providing social services for a patient population typically underserved in a setting not traditional to social services.

However, our study is not without limitations which may confine the generalizability of our findings. The views expressed in interviews were based on social care providers at one large urban acute care hospital with a specialized team to help meet to help meet the unique needs of patients who use drugs and are experiencing unstable housing and/or homelessness, which may not be representative of other acute care models. While efforts were taken to protect participant confidentiality, due to the small population of social care providers working within the study

setting and the nature of the study in asking participants to discuss aspects of their workplace and collaboration with colleagues, some participants may not have felt comfortable in sharing some of their views on social care provision [345]. Nevertheless, this study offers notable contributions. It produced new insights on how social services are provided to patients with intersecting structural vulnerabilities in acute care, and provided new insights to improve social care provision both within hospital and improve patient care transitions and outcomes post-discharge.

2.4.2 Conclusion

Our findings revealed several barriers that limit the successful provision of social supports within acute care for patients who use drugs and are experiencing unstable housing and/or homelessness, and suggest a number of acute care and broader policy changes that could potentially improve this population's health and social wellbeing. While hospital policy and some social care providers themselves acted as potential barriers to effective care, the hospital has the potential to serve a coordinated role in social care delivery. We suggest that acute care facilities augment their role as providers of social care and advocate for multi-level policy and interventions that address structural vulnerability, medical needs, and substance use. Doing so may help break cycles of perpetual structural vulnerability and hospital admissions for PWUD in Canada.

Chapter 3: “These harms exist because of the system”: Policy actor views on structural vulnerability in harm reduction and policymaking for illegal drugs

3.1 Introduction

The social determinants of health (SDH) are the social and economic factors that influence people’s health, such as income, education, and employment [53]. The concept of structural vulnerability extends SDH scholarship by further elaborating how health is impacted by individual and populations’ positioning within political, socioeconomic, and cultural hierarchies [54, 55]. From this perspective, illegal drug use and related harms are not generated by the availability of substances *per se*, but rather structural forces that shape patterns of drug use and related risk behaviours, reinforcing structural vulnerability [74, 346]. Some groups of people who use drugs (PWUD) experience compounding structural vulnerability. For example, communities of low socioeconomic status face increased risk of substance use and related harm due to inequities in institutions and social structures (e.g., schools, policing) and material resources (e.g., housing, employment opportunities) that promote social exclusion and relative deprivation [85, 86]. Harms from substance use also result from structural vulnerability created and maintained by criminalization and prohibition, which contribute to discrimination, violence, violations of human rights, and increase the risk of drug-related infectious disease transmission [64, 347].

Health and social policies that address the causes and consequences of structural vulnerability are a core component of a robust societal response to substance use. This includes supporting PWUD to be as safe and healthy as possible through a harm reduction approach to policymaking which does not enforce abstinence or make care contingent on reductions in substance use [285]. Harm reduction developed as informal and illegal grassroots practice (e.g.,

distribution of sterile syringes) led by PWUD, frontline workers, and activists. Harm reduction led by these groups aimed to promote and protect the human rights of PWUD and achieve broader structural changes such as access to adequate housing and income, and the legalization of drugs and sex work [262-264]. As harm reduction initiatives continued to grow, the approach became increasingly institutionalized by public health actors and systems, often removing control from the communities who use and experience harm reduction services [262, 264, 266, 267].

Critics have questioned the extent to which contemporary harm reduction policies have balanced protecting the rights of PWUD and promoting population health. Critics have argued that the institutionalization of harm reduction has over-emphasized individual risk reduction (e.g., behaviour change, personal responsibility), and masked health inequities that contribute to illegal drug use and related harm [259, 264, 271, 274, 276-280]. As a result, some have called for re-centering human rights in drug policy, and a refocusing of harm reduction policy and practice towards addressing structural, rather than personal factors that contribute to health harms at the population level [267, 278]. However, calls to better integrate human rights and structural factors have not been reflected in Canadian harm reduction policy documentation, based on the Canadian Harm Reduction Policy Project (CHARPP) [289, 293, 294].

CHARPP is a mixed-method, multiple case study with four data sources (i.e., interviews, policy documents, media articles, public opinion survey). CHARPP was designed to understand how harm reduction and policymaking are positioned across Canadian jurisdictions. Through policy analysis based on 17 quality indicators, prior CHARPP research found that formal policy documents performed poorly in recognizing structural factors. Of the 54 policy documents analyzed, only 39% acknowledged the stigma and discrimination faced by PWUD, 28%

endorsed human rights (e.g., dignity, autonomy) of PWUD, 26% considered SDH that influence drug-related harm, and 22% acknowledged that not all substance use is problematic [289]. This suggests limited government efforts to highlight and address structural vulnerability of PWUD within Canadian harm reduction policy and programs.

Despite demonstrated successes of harm reduction in reducing some drug-related risks [348-351], negative health outcomes such as hepatitis C virus and human immunodeficiency virus are still a significant cause of morbidity and mortality among PWUD in Canada and elsewhere [4]. Further, Canada's national drug poisoning emergency has escalated dramatically since 2014 [12]. Since national surveillance began in 2016, the highest quarterly count of opioid overdose deaths was 1,766 prior to the COVID-19 pandemic [13]. Since the onset of COVID-19, there were 5,148 quarterly overdose-related deaths between April to December 2020, an 89% increase compared to 2019 [13]. The increase in overdose deaths has been largely attributed to clandestinely-produced synthetic opioids, isolation, and limited availability to health and social services [9-11, 13].

The significant burden of disease associated with illegal drug use in Canada has called into question the ability of harm reduction programs focused on individual risk reduction to meaningfully tackle drug-related harm at the population level [352] or ameliorate structural vulnerabilities created by racialized policing [282], poverty and lack of employment opportunities [110], or continued criminalization and stigmatization of drug use [60, 111, 283]. More concerted policy action is required to address drug-related harm, improve the health status of PWUD, and promote health equity and human rights.

Policy actors shape structural vulnerability for PWUD through their influence over policymaking processes on illegal drugs. While research has documented the efforts of some

policy actors (e.g., PWUD, frontline harm reduction workers, activists) in advocating for structural changes to improve the health of PWUD [268-270], almost no research has explored policy actors' views on harm reduction philosophy or understanding of the role of policy in creating or influencing the material conditions in which PWUD live. Understanding how structural vulnerability is situated within drug policy discussions can illuminate potential explanations for its relative absence from formal provincial/territorial harm reduction policies and further efforts to address the structural conditions of PWUD. Therefore, we sought to examine the extent to which Canadian policy actors identify and discuss structural vulnerability in relation to harm reduction and policymaking for illegal drugs and what, if any, solutions they advance to reduce structural vulnerability for PWUD.

3.2 Methods

3.2.1 Sampling and recruitment

This study is an analysis of the qualitative interview data collected as part of CHARPP [293]. The CHARPP study received ethics approval from the University of Alberta Research Ethics Board. Detailed methods for the qualitative interviews conducted as part of CHARPP have been previously reported [294] and are briefly summarized here. Individuals were eligible to participate if they were involved in harm reduction policy discussions and knowledgeable about relevant drug policies within their provincial or territorial jurisdictions. The research team identified participants through purposive sampling [353]. Email invitations were sent to potential participants and additional participants were recruited via snowball sampling [354]. Policy actors were recruited to achieve a balanced sample between those occupying roles in government or health authorities, and those working in community-based organizations. This is consistent with other national-level health policy studies involving key informants from government and non-

profit sectors [355, 356]. Additional attention was placed on recruiting policy actors who identified as having lived experience of illegal drug use.

3.2.2 Data collection

The original CHARPP research team conducted semi-structured interviews (Appendix B) ranging from 30 minutes to one hour between November 2016 and December 2017. Interviews were conducted by telephone, Skype, or in-person. Interviews were offered in English or French. The interview guide elicited policy actors' perspectives on provincial and territorial harm reduction programs and policymaking for illegal drugs, including conditions that impact these policies and the health of PWUD. For example, the influence of formal and informal policies on harm reduction, factors that may facilitate or constrain harm reduction and policymaking for illegal drugs, and any efforts taken to address illegal drug use. A \$40 honorarium was offered for compensation when policy actors were participating on personal time. Interviews were recorded, transcribed verbatim, and cross-checked against the transcripts for accuracy. Sensitive information that may have identified participants were removed. Interviews conducted in French were translated to English by a bilingual interviewer.

3.2.3 Participants

As detailed by Hyshka et al. (2019), 75 of the 119 potential participants contacted agreed to participate (63% response rate). In total, 75 policy actors were interviewed (see Table 3.1 for participants interviewed by jurisdiction). Each policy actor was assigned a generic affiliation to protect participant confidentiality, were named according to their jurisdiction, and assigned a number. The primary affiliations of participants included community-based organizations, such as harm reduction programs and social services (n=33), provincial or territorial government (n=22), regional government (n=14), healthcare (n=2), academia (n=2), and law enforcement

(n=2). Nine participants (12%) also identified as someone with lived experience of illegal drug use.

Table 3.1 Policy actors categorized by jurisdiction

Province/Territory	Participants (n=75)
British Columbia (BC)	10
Alberta (AB)	10
Ontario (ON)	9
Manitoba (MB)	8
Quebec (QC)	8
Saskatchewan (SK)	7
Nova Scotia (NS)	6
New Brunswick (NB)	4
Newfoundland (NL)	3
Yukon (YT)	3
Nunavut (NvT)	3
Prince Edward Island (PEI)	2
Northwest Territories (NWT)	2

3.2.4 Data analysis

We used NVivo 12 to manage the original interview data and conducted a two-step inductive analytic process similar to that described by Haines-Saah et al. 2014 [357]. First, all 73 transcripts were read in their entirety to foster a sense of familiarity and cultivate a general understanding of emerging words, phrases, and concepts [321]. We block coded any mention of SDH or structural vulnerability in an effort to create a more manageable subset of data. This block coding process was conceptually guided by a number of widely used frameworks and theories (Appendix C). These included data on the main SDH in Canada (i.e., Government of Canada’s 12 SDH [358]), prominent SDH discourses among health researchers and professionals

(i.e., Raphael's seven SDH discourses [359]), and those specific to structural vulnerability and illegal drug use (i.e., Rhodes "Risk Environment" framework [58] and Bourgois et al.'s structural vulnerability assessment tool [55]). These guiding sources provided a list of concepts and constructs to attend to but were not exhaustive; we also block coded any additional related concepts that emerged from the data. Second, we conducted latent content analysis on the block-coded excerpts, which involved line-by-line coding applied to persistent concepts to develop a list of codes [321]. A preliminary list of sub-codes was developed and refined. We collapsed, expanded, and reconsidered sub-codes before sorting them into overarching themes. Several strategies were used to ensure rigour for both analytic steps: 1) a second member of the research team reviewed the codebook, categorization, and a subset of the transcripts for coherence and accuracy [329, 360]; 2) special attention was given to negative cases (e.g., views in contrast to majority consensus) [329] and; 3) an audit trail was used to engage in reflexivity and minimize bias [321, 329].

Critical realism guided our analysis by acknowledging that structural factors are transformed and produced through practices, policies, and actions [298, 302]. For example, after initial sub-codes were inductively developed they were critically examined based on known structural vulnerabilities (e.g., criminalization, socioeconomic status, housing, trauma). The intersectional nature of these structural factors was considered through NVivo coding queries and tree charts to examine relationships between codes. Concurrent literature consultation further facilitated understanding codes within the context of current and past drug policy practices and policies. The use of critical realism was of particular importance given structural vulnerability, harm reduction, and policymaking for illegal drugs are shaped by several social conventions and ideologies [302].

3.3 Results

In discussing harm reduction and policymaking for illegal drugs in Canada, the majority of participants discussed structural vulnerability in relation to drug use, drug policies, and related harm. Our analysis yielded the following main themes: 1) awareness of structural vulnerabilities associated with illegal drug use; 2) prohibitionist policies shape structural vulnerability in diverse ways; 3) the contested scope of drug policy; and 4) the need for more comprehensive policies to address structural vulnerability.

3.3.1 “Drug-related harms aren’t experienced equally across all populations”: Awareness of structural vulnerabilities associated with illegal drug use

The central role of SDH and structural vulnerability in driving drug-related harm was acknowledged across all provinces and territories. Almost all participants agreed that “there are a lot of structural issues that are associated with [substance] use” [ON5], which are “related to capitalism and societal oppressions” [BC2]. They described illegal drug use as occurring across all socioeconomic groups, but outlined how PWUD facing structural vulnerabilities (i.e., “shaped by race, class, gender and colonial relations” [MB4]), are much more vulnerable to drug harms compared to those without structural vulnerabilities. Poverty was described as the main structural vulnerability that perpetuates drug-related harm. For example, a participant described how homeless populations experience far more substance-related harm because they are more visible, and more stigmatized and moralized:

I think this is a population wide issue. Absolutely. I mean for people who are homeless or otherwise street involved or who are living in poverty, they will differentially... experience the affects much more intensely because of stigma, because they are visible, because they don’t have the same access to resources and supports and they have other complications of health and social determinants of health which make the impacts of drug use much more profound for those individuals. They will always be, worse off, in terms of the impacts of drug use than other socioeconomic groups. [ON1]

Trauma (e.g., adverse childhood experiences, physical and sexual violence) was often acknowledged as a key aspect of structural vulnerability. Participants across all provinces and territories outlined cultural and intergenerational trauma in creating and perpetuating structural vulnerability for Indigenous Peoples as the result of Canada's legacy and ongoing colonization against Indigenous Peoples [33, 34, 38-40]. As one participant from Nunavut described:

[T]here's a whole legacy and sort of backdrop of a lot of historical trauma related to colonialism, where...the carpet was whisked out from under them and that sort of connection to cultural roots and that sense of knowing...where I've come from...I think that we're seeing the aftermath of that and the intergenerational cycle or transmission of trauma over time...And I think the [illegal] drug use that we've seen here has a lot to do with that and to do with those historical variables that have happened. [NvT1]

Other participants articulated a more complex relationship between substance use, poverty, colonization, and trauma by applying an intersectional lens. These participants described compounding social and health statuses, and structural forces that create a "cycle of individuals continuously being put at risk because of their drug use" [SK4], further marginalizing and oppressing PWUD. One participant summarized this interplay by saying:

[A] lot of determinants are in the social circumstances. Poverty, isolation, marginalization, by ethnic groups, whether it's [Indigenous Peoples] in Canada or Black people in the US. Some of the lack of housing which goes along with poverty. People that have mental disorders. There's a whole marginalization, stigmatization with people with mental disorders, just gets aggravated, and part of that is not being adequately treated but they find some systematic relief in drugs...so that kind of feeds into that problem as well. The whole area of marginalization of sex trade workers and that's a very difficult risky occupation and so substance use or sex for drugs goes along with that too and how those people get into that area of activity often [had] very difficult childhood or upbringing situations. All that kind of nexus of those things that result in the disproportionate burden of health on people who have lower amounts of financial or physical resources. [BC1]

Participants across all provinces and territories clearly identified the relationship between substance use and structural vulnerability including poverty, homelessness, racialization and colonialization in creating drug-related harm across the provinces and territories.

3.3.2 “We have harmful drug policies”: Prohibitionist policies shape structural vulnerability in diverse ways

“[T]he ongoing criminalization of individuals who use drugs” [ON9] was described as “one of the governmental tools to control people” [MB1]. Criminalization was seen as contributing to structural vulnerability and related harm by creating many of the formal and informal prohibitions against drug use, and by extension PWUD. The majority of participants recognized that “the criminalization of people who use drugs is really about criminalizing poverty” [MB1] because “if you look at who’s in jail and who’s suffering...it’s people living in poverty” [NB4]. For example, one participant highlighted the criminalization of poverty by describing police issuing tickets for selling items on the sidewalk and went on to say: “anyone in this town can have a yard sale and no one gives a shit but they don’t have yards” [BC3]. Unpaid tickets and fines were discussed as escalating punishment and encounters with the criminal justice system (e.g., warrants, court orders). Participants told us that these formal prohibitions create “a lot of harm from criminal records and going to jail” [MB4], ultimately entrenching people in cycles of poverty and oppression (e.g., by limiting occupational opportunities, cycles of incarceration). This cycle was highlighted by one participant who said:

When police then re-arrest this person, their arresting them for not showing up at a court appearance or their violating any condition, any community condition....it can be released conditions from jail, it can be bail conditions, it can be just simply missing an appointment, like who knows what day of the week it is, geeze they live in a God damned alley...they’re re-arrested and re-arrested and re-arrested. [BC3]

Aside from criminalizing poverty, participants also acknowledged that racialization contributes to discrimination against subpopulations of PWUD, including the disproportionate impact of drug criminalization on Indigenous Peoples. As one participant outlined:

We know Indigenous Peoples aren’t using more substances than any other population, but they’re being criminalized at higher rates...We also know that we have many, many

non-Indigenous Peoples who get caught by police all the time who never end up in jail. [T]here's a huge racialized population that are over represented and over impacted by criminalization... criminalization is really just a way to control particular cohorts of people, right? [MB1]

However, the criminal justice system was described as “only one of [the] systems that continues to impact people” [MB1]. The majority of participants cited how “inequitable healthcare for people who use drugs due to prohibition is one of our main issues” [MB1]. Prohibition was described as leading to intense stigmatization of PWUD, making it hard for them to seek support, access services, and receive quality care. One participant told us:

[S]tigma and judgment exists in a really heightened form. And that's huge when it comes to people sort of hiding, not seeking out help, not wanting to disclose to people that could save their life, but also connect them to healthcare and services. And I think there's stigma that hugely impacts the care they receive and the way that they experience services, from healthcare to social services. [BC6]

Participants also felt that drug prohibition is reinforced through certain social policies (e.g., child protective services, income assistance, housing) which perpetually discriminate against PWUD. For example, a participant from Alberta described that structurally vulnerable women who use drugs are largely excluded from social assistance, which creates “terrible outcomes and lots of kids put into foster care and then the cycle continues” [AB3]. Another participant told us that current housing supports often exclude PWUD, leaving them no option but to live in homelessness:

[O]ur shelter programs across the province, the supportive housing programs, a lot of them have really restrictive criteria when it comes to like people who are using substances...so I mean a lot of people who are using substances have no other choice but to go out and risk sleeping on the streets...there's a really unequal access to shelter for people who are using substances which is really a bit of a human rights issue. [NL2]

The criminal justice system and health and social systems were seen as interacting with one another to exacerbate harm to PWUD. One participant highlighted this by saying:

[B]ecause the substance they're using is defined and approached as illegal, then historically that we take criminal justice approach. Penalize them, we put them in jail, and then we don't provide the supports for them when they come out of jail...I think people end up with [substance use] because of our criminal justice approach, we exacerbate the problems. We drive them away from treatment. We drive them away from harm reduction services. We don't address even their immediate needs that would help them stabilize themselves...it's the fact that those needs aren't being met are actually probably continuing to drive their [substance use]. [NS3]

Taken together, criminalization was seen as extending into health and social systems, subjecting PWUD to a litany of formal and informal sanctions against drug use, particularly in: 1) penalizing poverty and race; 2) decreased access to, and quality of, health services; and 3) exclusion from social policies (e.g., income assistance, housing supports, child protective services).

3.3.3 “There’s a fundamental tension in harm reduction and policymaking”: The contested scope of drug policy

Tensions emerged regarding the purpose of drug policy. Participants’ personal views of harm reduction differed from provincial and territorial harm reduction policy. In addition, participants were concerned that medicalization and institutionalization of harm reduction may have obscured opportunities to intervene on broader structural factors driving the main harms associated with substance use. Most participants told us that they thought of harm reduction as a way to ameliorate structural vulnerabilities experienced by PWUD, describing it as a humanizing and non-judgemental philosophy of care that has an “understanding of drug use and risk and the social determinants of health” [AB2]. For example, one participant described how:

Harm reduction is about an overall picture of health and wellness. What do you need to be healthier, or have healthier outcomes now, what do you need to have healthier outcomes than you do right now? And maybe that’s better access to food on a regular basis. Maybe that’s housing. Maybe that’s, just having a place to go and be listened to when, even if you’re high. To me it’s about the overall being of a person. [PEI1]

However, the majority of policy actors we interviewed were quick to state that their personal views on harm reduction were in direct conflict with the definitions used in formal government or health authority policy. A participant from Quebec told us that while harm reduction acknowledges personal responsibility in minimizing risks associated with substance use, it ultimately aims to address structural factors that create or perpetuate harm, whereas government directives stop short of the latter:

[T]he government's definition may be a bit reductionist, OK? Where they speak more from an individual point of view. Whereas here at [our organization], yes, there is the individual point of view, which places emphasis on the harms, the risks related to use...but there is the whole more societal aspect, for example, in terms of advocating for rights. In terms of the transformation of structures, and even all the way to changes in the law...We take it more from a structural point of view, the harm reduction approach, but the government doesn't see it or define it in that way. [QC4]

Participants perceived that this gap in understanding the fundamentals of harm reduction was largely due to the “government [being] very detached from the frontline” [ON6] which ultimately overlooks how harm reduction programs support resources for mitigating structural vulnerabilities. One participant from Alberta said:

I think [the government] understands the value of our work but I don't think they understand the true nature of drug use and the culture and what harm reduction really looks like. I don't think they really get that we had a sex worker that wanted to leave sex work last week and that, how that fits into our work...somebody who needs housing and hear[ing] all the things that are in the way. [AB4]

Medicalization and institutionalization were seen as mechanisms that may have shifted harm reduction away from its original philosophy of addressing broader structural factors. Participants voicing this concern felt that policies and programs reinforcing medicalization (e.g., structured opioid agonist treatment) and institutionalization (e.g., health authority oversight) center drug use as the main driver of health and social harm, deemphasizing the role of structural vulnerability. For example, while participants acknowledged that medical approaches have a

place in substance use responses, they outlined how an overemphasis on medicalization can undermine the intended purpose of harm reduction. One participant said:

It makes me a wee bit nervous to see such a focus on medicalized approaches...those kinds of interventions are really crucial and important, particularly within context of prohibition...[but] that further medicalization continues to sort of take us away from the real heart and soul of harm reduction...which is social justice and dignity for people who use drugs...more psychosocial and community focused initiatives may not get as much weight or value when focusing on medicalized interventions. [BC2]

Similarly, others explained that institutionalization may have also shifted focus away from acknowledging and acting upon structural vulnerability that creates drug-related harm because institutionalization reinforces drug use as a health issue, rather than a product of structural factors. For example, one participant told us:

Harm reduction was initially a kind of social movement...there were no rules governing it, so to speak. But with the institutionalization of harm reduction, it sort of became depoliticized and it was less about critiquing, trying to identify the forces and factors responsible for producing harm...more focused on the individual user, the body of the user, the pathology paradigm, addiction as a disease...that whole philosophy kind of negates the possibility of any kind of structural critique...looking at poverty and oppression, homelessness, trauma and abuse...the founding philosophy of harm reduction was very much about that. [NL3]

Collectively, despite participants expressing that their personal understanding of harm reduction included addressing the structural conditions facing PWUD, most felt that: 1) medicalization and institutionalization has inadvertently obscured addressing structural factors within harm reduction programs; and 2) formal government policies often ignore or downplay structural vulnerability, limiting the authority of harm reduction services to address the structural conditions of PWUD.

3.3.4 “The things that we’re doing right now, honestly is just keeping some people alive”: The need for more comprehensive policies addressing structural vulnerability

Participants discussed ways in which they endeavoured to shape harm reduction and policy to better respond to structural vulnerabilities, and identified multiple potential policy solutions. Citing an absence of provincial and territorial leadership, policy actors we spoke with outlined informal strategies often used to address structural vulnerability of PWUD because “community organizations are the principal ones that influence those policies” [QC2].

Community agencies were described as responding to policy gaps (related to poverty, gender inequities, barriers to health and social services, etc.) under their own initiatives not formally supported by provincial or territorial policies. This included vocal policy advocacy. For example, in Newfoundland, one participant told us:

A lot of shelters that aren't accepting people who are under the influence and I think there is a huge push to change that...we're looking at our non-profits and your people who are grassroots and your social frontline workers are the biggest advocates because they're seeing the need for it and they're seeing how harm reduction benefits the population and the community as a whole and not just our clients. [NL2]

Frontline and community-based policy actors also targeted governments with advocacy for formal policy changes, often in direct opposition to government mandates. This could include active defiance of government laws or directives, which was often viewed as the only way to mobilize policy because “only through civil disobedience would [policies] appear” [BC3].

The majority of participants proposed policy solutions that could “better address the determinants of health [and] decrease inequities” [NS3]. Many explicitly stated that “we have to stop criminalizing people who use drugs” [AB2] or called to “legalize everything or at least decriminalize” [AB9]. Decriminalization, while identified by participants in most of the provinces and territories, was particularly prominent in interviews conducted with policy actors from British Columbia. Safer supply (i.e., providing legal access to pharmaceutical alternatives to street drugs [361]) was also seen as a way to mitigate structural vulnerabilities for PWUD.

One participant told us that bolstering harm reduction services with decriminalization and safer supply would more comprehensively reduce drug-related harm:

[S]afe consumption sites alone will not reduce crime. They have other benefits but if you're looking to make that nexus to be credible we can't say that by itself will reduce crime. And that's where you need decriminalized drugs and prescribed heroin...if we could find a way to prescribe the drug of choice for all the [people who use drugs] that [are] part of these programs, that's when you start impacting not just the social issues but the criminal issues as well. [AB9]

Participants further emphasized that “comprehensive harm reduction services would involve so many areas within health systems” [AB6] and therefore drug policy needs a stronger intersectoral approach. For example, one participant highlighted the various health and social sectors that are required to create a holistic solution to structural vulnerability and illegal drug use:

I think every single department, we all need to look at this together. So things like housing, education, food security, culture and language, income, personal sense of safety, mental wellness, education, family service, health, justice...to be able to really have a comprehensive approach all of the departments need to come to the plate and start work[ing] together on devising a holistic solution because I don't think it can be the activities of one department and I think to address this is such a huge, huge undertaking that it would have to be a collective. [NvT1]

Similarly, aligning harm reduction and drug policy with broader social movements that address structural vulnerability (e.g. poverty reduction, gender equity, antiracism) was described as a way to promote a holistic approach to drug use. Intersectoral and intersectional approaches were seen as a way to proactively intervene on structural vulnerability, particularly since “starting with [substance use] is too late...we need to target the conditions that create the [substance use]” [AB1]. Importantly, more significant involvement of people with lived experience of illegal drug use and structural vulnerability within drug policy development was said to be vital to ensure “that we're actually doing things that are meaningful for them” [BC10].

3.4 Discussion

This study is the first to examine how Canadian policy actors discuss structural vulnerability in relation to harm reduction and policymaking for illegal drugs. The majority of participants in our study acknowledged structural vulnerability, particularly poverty, trauma, colonialization, and criminalization. Formal and informal prohibitionist policies within health and social systems resulting from criminalization were described as perpetually oppressing PWUD by reinforcing their structural vulnerability. Given an absence of effective policies addressing structural factors, several potential policy solutions are highlighted.

The processes and outcomes of structural vulnerability [55, 58, 67, 74, 142] as well as the perspectives of PWUD on how structural factors shape their experiences with health and social services [57, 126-128] have been well documented. While this literature has been particularly useful for understanding health and social inequities faced by PWUD, it has not illuminated how drug policy discourses engage with structural vulnerability and resulting inequities. To our knowledge, only one other study has touched upon structural vulnerability from the perspectives of policy actors. Ritter (2007) found that when discussing policy priority areas for illegal drugs, Australian policy actors acknowledged that SDH and structural factors should be considered as part of drug policy, yet they were unclear on how addressing structural factors could be advanced through policy [141]. We add to this limited knowledge base by highlighting the high importance participants in our study placed on structural vulnerability and offer several reasons that may explain why harm reduction policies have been relatively ineffective in addressing broader structural factors in the lives of PWUD to date.

Our findings underscore that the lack of official policies governing harm reduction (as previously reported through CHARPP [289, 293]) may partially explain why harm reduction

strategies struggle to intervene on structural vulnerability. Participants in our study stressed that government policies are not reflective of the intended purpose of harm reduction in alleviating structural conditions for PWUD. Rather, government policies on harm reduction were seen as largely focusing on drug-related risk behaviours. Moreover, the increasing institutionalization and medicalization of harm reduction was seen as further obscuring the original goals of mitigating structural vulnerability through harm reduction. Other CHARPP research has similarly reported that policy actors describe institutionalization as constraining the ability to meet the needs of PWUD, citing informal community initiatives as more responsive in advancing programs and services for PWUD [294]. We build upon these findings; when attempting to tackle structural vulnerability in particular, participants relied on local advocacy (e.g., removing abstinence-based policies in housing supports). Taken together, the findings from CHARRP to date provides much needed empirical evidence to support broader non-empirical criticisms of individual-level harm reduction strategies masking structural vulnerability [259, 264, 271, 274, 276-280].

Formal drug policy documentation would benefit from explicitly acknowledging the relationship between structural vulnerability and drug-related harm, moving beyond rhetorical support for harm reduction programs, and outlining policy actions designed to mitigate structural barriers faced by PWUD. Doing so may help realign the original philosophy of harm reduction within institutional and medical harm reduction policy. Future research may also benefit from exploring whether shifting government and health authority harm reduction responsibilities back to the communities and PWUD who originally advanced them may better operationalize harm reduction embracing ‘new public health’ principles (e.g., acknowledging the interdependency of health, addressing structural vulnerability, balancing health and social services) [247, 248].

An intersectional lens, encompassing poverty, trauma, and colonization, was often used by participants when describing structural vulnerability impacting drug-related harm. However, current drug policies often focus on one-dimensional social locations (e.g., illegal drug use) further reinforcing individual behavioural interventions [362, 363]. The integration of intersectional and intersectoral approaches to drug policy were seen as having the potential to better inform structural interventions attuned to multiple inequities. This was a prominent policy suggestion offered by participants given: 1) multiple systems were seen to interact, creating and reinforcing oppression of PWUD; and 2) proactive intervention was described as essential to address potential upstream contributors to illegal drug use (e.g., income security, access to employment and stable housing, reconciliation). These approaches may include acknowledging systemic factors based on multiple axes of vulnerability as well as strategies involving multiple agencies and government departments responsible for health and social policies [362, 364-367]. However, the application of intersectoral and intersectional frameworks attending to numerous complexities has remained challenging [362, 366]. While there have been efforts to develop multisectoral approaches to homelessness [368], they often fall short of factoring in substance use and harm reduction [260]. We recommend that future research systemically identify strategies for substance use, harm reduction, *and* homelessness and/or unstable housing within intersectional (e.g., ‘intersectional risk environment’ framework [362]) and intersectoral (e.g., ‘Health in All Policies’ [369], ‘whole of government’ [370]) approaches. This could include substantiating harm reduction in more health and social policies (e.g., housing [260], income assistance, child protective services) which typically preclude PWUD, either formally or informally, in order to safeguard their access to fundamental health and social services without reinforcing structural vulnerability.

While much has been done to help mitigate drug-related harm, illegal drug use and structural vulnerability continue to cause harm [74, 346], and Canada's drug poisoning emergency shows no signs of slowing [13]. Systemic change to address underlying socio-political inequities is complex and may be restricting policy action on reducing social, economic, and cultural inequities. For example, shifting political landscapes to address systemic inequities requires major changes in ideologies and/or complex social processes [371]. Addressing inequities is especially challenging under current societal arrangements that reinforce social hierarchies, such as capitalist and neoliberal ideologies (see literature on systemic race [61, 372] and gender [373, 374] inequity in drug policies maintained by neoliberalism). Urgent action is required while more complex policies that target social, economic, and cultural equity evolve. Decriminalization of illegal drugs and safer supply have the potential to act as a means of social justice [361, 375, 376] and begin mitigating structural vulnerability for PWUD in the absence of more progressive policies or societal ideologies targeting systemic social inequities. Participants in our sample suggested that decriminalization and safer supply can help mitigate structural vulnerability by: 1) removing formal and informal prohibitionist policies against PWUD; 2) alleviating stigma associated with drug use and treatment seeking; and 3) legitimizing current harm reduction programs.

Regardless of how policy action is advanced to address structural vulnerability, participants stressed that it was imperative to include PWUD at the forefront of decisions. Active engagement and co-design initiatives with PWUD in policymaking can better challenge the status quo, minimize generalized assumptions regarding drug use and structural vulnerability, and help mitigate potential unintended consequences of proposed policy solutions [377, 378]. However, structural vulnerability itself also affects the extent to which PWUD are able or willing

to engage in policy and academic development [379]. Policy and academic spaces often have structural and attitudinal barriers such as stigma and discrimination that limit successful engagement with PWUD. PWUD have described insufficient recognition, inadequate pay, limited career opportunities, and tokenistic engagement [127, 380-382]. Attempts to engage PWUD should therefore be thoughtful and authentic to minimize trauma and support the wellbeing of PWUD [379, 383]. Policy actors wishing to engage PWUD should consult guidelines developed by PWUD and harm reduction professionals on facilitating engagement that is equitable and culturally safe [377, 384, 385].

3.4.1 Strengths and limitations

Our study provides the first empirical data explicitly examining structural vulnerability from the viewpoint of people in positions to influence harm reduction and drug policy. We also provide novel insights on how policy can exacerbate, or have the potential to alleviate, structural vulnerability for PWUD. This study utilized several well-established frameworks contextualizing SDH and structural vulnerability which adds to the robustness of our analysis and subsequent findings. In addition, the heterogeneity of policy actor experiences, harm reduction efforts, and political affiliations produced rich narratives, particularly given our intersectoral focus and emphasis on balancing representativeness from Canada's 13 provinces and territories.

Despite the strengths of our study, it is not without limitations. The results from key informant interviews may not present the complex and contradictory nature of people's views. People's views are often context contingent, so opinions expressed in interviews vary according to how the interview is designed and presented to them [386]. Furthermore, data for this study was collected between 2016 and 2017 which limits viewpoints on policy developments after this time. While we did consider differences across provinces and territories by comparing coding

frequencies, this strategy did not allow for more formal comparative analyses. Finally, this study did not collect data on possible intersectional demographics (e.g., gender, race) of participants which could have provided further context. Nevertheless, this study offers noteworthy contributions, particularly in the depth of appreciation for structural vulnerability by participants and the critical considerations we provide for mitigating structural vulnerability among PWUD through more proactive and responsive policies.

3.4.2 Conclusions

Our findings revealed the importance of structural vulnerability in Canadian policy actors' discourses, yet formal policies acknowledging or reinforcing structural factors are lacking. Our study suggests that large scale societal reforms, such as addressing poverty, gender, and racial inequities are required to mitigate structural vulnerability in and of itself. However, these strategies require extensive reforms to societal processes and responding policies, limiting their immediate applicability. We contend that while these long-term societal and policy changes are required to address social inequities and alleviate structural vulnerability for PWUD, more urgent action is required. Decriminalization and safer supply have the potential to mitigate structural vulnerability of PWUD while policies evolve to advance social, economic, and cultural equity.

Chapter 4: Conclusions

The overarching purpose of this thesis was to generate knowledge on mitigating structural vulnerability of PWUD. Specifically, this thesis attempted to identify strategies at the clinical- and policy-level to more effectively intervene on the structural conditions that make PWUD vulnerable to a host of negative health and social harms. This was accomplished by analyzing two qualitative datasets with the aims of: 1) examining the perspectives of social care providers on delivering social supports to structurally vulnerable patients who use drugs to help strengthen acute care social service provision; and 2) examining the extent to which policy actors discuss structural vulnerability in relation to harm reduction and policymaking for illegal drugs to guide better incorporation of structural factors within formal policy. The remainder of this concluding chapter summarizes the main findings of this thesis, discusses strengths and limitations, and considers implications for policy, practice, and future research.

4.1 Main findings

The purpose of Study 1 was to assess social care providers' views on addressing the social needs of structurally vulnerable patients who use drugs within acute care. Similar to literature on general acute care provision [140], tensions emerged on how participants viewed patient-level barriers. Most participants explained barriers in providing social supports as a response to individual patient choices; however, others explained these barriers as a response to structural conditions, adding to broader literature on structurally vulnerable patients struggling to access supports while balancing more immediate priorities [203, 242, 332]. Acute care visits were described as a rare opportunity to reach structurally vulnerable patients because it provides a relatively stable environment. These findings echo other work describing hospitalization as temporarily alleviating structural vulnerability for patients (e.g., food, shelter, security) [189,

195]. The dominant medical model of the hospital as well as informal hospital practices created pressures to discharge patients. These pressures left social care providers struggling to provide more than short-term solutions. Several community gaps were identified, particularly in housing supports. Similar to other literature on acute care provision, participants reported waiting lists for housing supports as limiting successful social care provision [203, 243, 387]. In addition, the complex medical needs and substance use of patients excluded them from housing supports given the majority do not condone drug use or provide medical care. Establishing transitional housing programs, hospital-based Housing First teams, and harm reduction sub-acute care facilities that provide medical care, harm reduction, and individualized skills development were seen as solutions to reduce discharges to homelessness and improve patient outcomes.

The purpose of Study 2 was to examine the extent to which Canadian policy actors identify structural vulnerability within harm reduction and policymaking for illegal drugs. Structural vulnerability (e.g., poverty, trauma, colonization) were acknowledged across all provinces and territories in influencing drug use and producing related harm. Criminalization, in particular, was seen as creating many of the formal and informal prohibitionist policies that reinforce structural vulnerability and entrench people in cycles of poverty and oppression. Together, these findings reflect broader literature on socio-political factors underlying structural vulnerability [55, 57, 58, 67, 74, 126-128, 142]. Participants expressed that the imagined purpose of harm reduction in supporting PWUD beyond substance use is not reflected in formal government policies. Participants further expressed that harm reduction is hampered by institutionalization and medicalization, corroborating broader findings from CHARPP [289, 293, 294]. In the absence of government leadership, participants relied on community initiatives and active defiance to address gaps in tackling structural vulnerability, echoing efforts by ‘non-

official' policy actors (e.g., PWUD, frontline harm reduction workers, activists) in advancing structural vulnerability in harm reduction policymaking [268-270]. Decriminalization, safer supply, and intersectional and intersectoral drug policies were seen as ways to better address structural vulnerability and decrease inequities.

4.2 Strengths and limitations

This thesis offers original contributions to the structural vulnerability literature specific to PWUD. Both studies add to broader literature on the relationship between structural vulnerability and health, social, and harm reduction care for PWUD [55-57, 126, 127, 135, 139, 140, 340]. However, it is amongst the first to formally examine how social care providers and policy actors perceive structural vulnerability of PWUD within their work. Strengths and limitations specific to each study are provided in Chapters 2 and 3 and those collective to this thesis are explored below.

Several strengths reinforce this thesis as a whole. First and foremost, the analysis of qualitative data in both studies comprising this thesis was particularly important in understanding how systems actors think through the complex and intersectional concept of structural vulnerability. Qualitative analyses provided an avenue to understand the attitudes and values that underlie these individuals' understanding of structural vulnerability [321, 344]. Moreover, the use of critical realism as an overarching approach further acknowledged the complex and intersecting relationships between substance use, social services, acute care, and harm reduction which established practical policy recommendations [298]. Finally, both studies utilized maximum variation sampling which ensured participant diversity [344]. As a result, the heterogeneity of both social care providers and policy actors sampled in each study produced

rich and in-depth narratives to help explain how structural vulnerability is situated within clinical and policy levels of influence.

However, there are several collective limitations to the research described by this thesis. The data collected for both studies were previously collected. The data collected for Study 1 ended in January 2019 and the data collected for Study 2 ended in December 2017. Services and policies responding to illegal drug use in Canada fluctuate, sometimes rapidly, between advancement and regression [289, 294]. As such, the opinions reflected in this thesis on policies and services responding (or not responding) to structural vulnerability may not reflect current responses to substance use within Canada. However, this only reinforces the broader challenges of addressing structural vulnerability due to contradictory responses in alleviating drug-related harm. In addition, neither study examined the intersecting identities of participants. Given this thesis focused on intersecting positionalities, this may have limited further contextualization of participant perspectives. For example, participants occupying positions of privilege may have had differing perspectives on structural vulnerability of PWUD compared to those potentially identifying with constructs of oppression that disproportionately affect PWUD (e.g., racialization, sexism). Finally, the perspectives of PWUD were not formally included in this research, which could have added additional context for structurally vulnerable PWUD.

However, members of an advisory group of people who have lived/living experience of drug use, homelessness, and hospitalization reviewed and corroborated the findings for both studies and informed the overall thesis recommendations, strengthening the applicability of this research for structurally vulnerable PWUD. Moreover, the perspectives of PWUD on their experiences negotiating structural vulnerability within health and social care is well documented [57, 126-128] and the abundance of literature on structural vulnerability from the perspectives of PWUD

reinforced the need for understanding structural vulnerability from the perspectives of professionals who influence structural vulnerability in the first place, which has received very little attention to date.

Despite the limitations mentioned above, this thesis contributes to the literature on structural vulnerability of PWUD by examining this concept from a new vantage point; through the eyes of clinical and policy professionals who influence the services and policies shaping the lives of PWUD. These findings may provide guidance for broader improvements in the health and social care of PWUD in Canada, particularly in regards to structural vulnerability, and have the potential to apply to other jurisdictions facing similar drug-related harm stemming from social and structural inequities.

4.3 Policy and practice implications

At the clinical-level, acute care has the potential to serve an active role in alleviating the structural vulnerability of PWUD by providing more comprehensive supports to address their unmet [145, 186-190] and inadequately addressed [145, 306, 307] social and basic material needs. However, findings from Study 1 underscore general constraints of the traditional biomedical model of the hospital in creating social care provision barriers [194, 308, 309]. In order to address the structural conditions of patients who use drugs who are experiencing homelessness and/or unstable housing in particular, additional targeted strategies (e.g., active case finding of SDH and structural vulnerability) and multi-level supports (e.g., those that collectively support medical, substance use, and life skills) are required. At the policy-level, despite acknowledgment of structural vulnerability, policy actors reinforced that government policies are largely restricted to individual-level risk reduction [272-275] rather than addressing structural vulnerability of PWUD. Study 2 highlights that formal incorporation of structural

vulnerability within drug policies, upstream policies addressing social inequities, and drug policy reforms are required in order to substantiate the intended purpose of harm reduction in mitigating broader structural factors that create undue harm to PWUD.

Taken together, both studies underscored how drug use itself creates considerable structural barriers to obtaining social supports given formal and informal prohibitions against substance use. Specifically, the findings of this thesis highlight that the criminalization of drugs extends prohibitionist policies into social supports, particularly in housing, income assistance, and child protective services. Policy makers and service planners should aim to ensure drug use is not an exclusion criterion to access these services and incorporate harm reduction philosophy into these social supports. Doing so may help improve patient outcomes once discharged from acute care facilities and improve the health and social wellbeing of PWUD accessing harm reduction programs by fostering comprehensive social care regardless of drug use. Enhancing acute care and harm reduction roles in social care provision may also be of benefit. More formally identifying SDH and structural vulnerability, expanding social supports within acute care, and providing social services directly in harm reduction programs are possible solutions.

Findings from Study 1 suggest that patients who use drugs and have medical needs would benefit from transitional and sub-acute care housing options that incorporate harm reduction. Hospitals are increasingly implementing harm reduction strategies (e.g., naloxone distribution [388, 389], supervised consumption services [190, 390, 391], opioid agonist treatment [392, 393]). While implementation of harm reduction into acute care has been slow, it may be feasible to incorporate harm reduction into transitional inpatient units which are typically abstinence-based. Patients have described harm reduction options within acute care as creating safer environments that makes it possible to reduce harms associated with consuming drugs while

hospitalized [391]. However, findings from Study 2 suggest that medicalization and institutionalization may obscure the role of structural vulnerability. Community-based housing programs better integrating harm reduction and medical care may be a more pertinent solution. COVID-19 highlighted the feasibility of incorporating substance use, medical needs, and housing into community-based responses to help address the structural vulnerability of PWUD.

The COVID-19 pandemic introduced several challenges for structurally vulnerable PWUD who were limited in their ability to follow COVID-19 protocols (e.g., physical distancing, handwashing) [394, 395]. Emergency shelters and harm reduction services cut their capacity to meet physical distancing guidelines and access to essential healthcare services were limited, increasing risk of both COVID-19 and overdose for this population [396, 397]. Public health officials, health and social care providers, and outreach workers recognized these challenges and mobilized holistic measures to support this population. For example, conference centers and hotels were utilized as emergency temporary housing. Many were equipped with both medical care and harm reduction interventions (e.g. interdisciplinary care teams providing basic medical and social services, opioid agonist treatment initiation, on-site supervised consumption services, provision of sterile drug use supplies) [396, 398]. It is imperative to capitalize on the groundwork laid by this public health emergency, as it has shown beneficial in alleviating some of the structural vulnerabilities faced by PWUD.

Most importantly perhaps, findings from this thesis suggests that larger policy reforms are necessary to alleviate structural vulnerability for PWUD. This thesis as a whole emphasizes the intersectionality of structural vulnerability and how multiple systems reinforce structural disparities. Concerted efforts in addressing overarching health and social inequities (racialization, sexism, colonialization, poverty) are required to proactively intervene on structural

vulnerability. Strategies and interventions targeting multiple structural inequities as well as involving all agencies and departments responsible for health and social policies in drug policy reform are needed [362, 364-367]. At minimum, decriminalization is urgently needed to begin alleviating structural vulnerability. Decriminalization can help ease prohibitions against drug use that perpetually oppress structurally vulnerable PWUD and ultimately strengthen health and social policies, reduce stigma and discrimination, and begin advancing equity for PWUD.

4.4 Considerations for future research

This thesis may help guide future research on improving the structural vulnerability of PWUD. A number of areas for future research were identified in Chapters 2 and 3. When considered in its entirety, this thesis helped identify a number of overarching research areas that warrant further investigation. First and foremost, given limited literature on the perspectives of clinical care providers [135, 139, 140] and policy actors [141] in how they understand and interpret structural vulnerability, future research should build upon the findings from this thesis. For example, health and policy professionals may benefit from formal structural competency training [55, 137] and future research could assess the extent to which this training changes narratives of structural vulnerability or prompts practice or policy action to address structural factors. Moreover, while structural vulnerability has been well documented [55, 57, 58, 67, 74, 126-128, 142, 340], future research could explore: 1) how changes in policies and services impact structural vulnerability (see McNeil et al. (2015) for an example [126]); and 2) systematically evaluate structural interventions [371, 399] and their effect on the health and social outcomes of PWUD, with particular attention on how structural conditions are impacted.

In addition, the research conducted in this thesis considered the structural vulnerability of PWUD by considering multiple positionalities together. Poverty emerged as a main contributor

to structural vulnerability. However, particular subgroups of structurally vulnerable PWUD are at elevated risk of drug- and structural-related harm, including youth [30, 47, 48], LGBTQ+ individuals [34, 49, 50, 72], and BIPOC communities [33-35, 38-40]. Therefore, it would be beneficial for future research to consider how the structural vulnerability of these subpopulations are influenced by clinical and policy professionals in particular. Finally, this thesis identified larger policy transformations as necessary in mitigating structural vulnerability for PWUD. Research should look to how literature and frameworks targeting SDH for health and social inequities for wider populations [369, 370, 400, 401] can be translated to policymaking for illegal drugs. It is likely that increasing equity more broadly can, by extension, also benefit PWUD as their structural vulnerability is underpinned by these social disparities.

4.5 Conclusions

Overall, this thesis yielded novel insights on the perspectives of individuals operating within clinical and political spheres who influence the structural vulnerability of PWUD. Specifically, the research presented in this thesis was one of the first of its kind to examine how social care providers intervene on structural vulnerability for patients who use drugs, and policy actor perspectives on the extent to which structural vulnerability is situated within drug policies and harm reduction. Together, the findings of this thesis reinforce that structural vulnerability will continue to adversely harm PWUD unless greater efforts are established within acute care, harm reduction, and drug policies to formally target structural inequities. Overall, the findings and recommendations of this thesis have the potential to help ameliorate socio-political factors that increase and reinforce drug-related harms for PWUD and ultimately better support their health and social wellbeing.

References

1. Health Canada. Canadian Tobacco Alcohol and Drugs (CTADS) survey: 2017 summary. 2018. Available from: <https://www.canada.ca/en/health-canada/services/canadian-tobacco-alcohol-drugs-survey/2017-summary.html>.
2. American Psychiatric Association. Diagnostic and statistical manual of mental disorders (DSM-5®): American Psychiatric Pub; 2013.
3. Pearson C, Janz T, Ali J. Health at a glance - mental and substance use disorders in Canada. Statistics Canada; 2013. Available from: <https://www150.statcan.gc.ca/n1/pub/82-624-x/2013001/article/11855-eng.htm>
4. Degenhardt L, Peacock A, Colledge S, Leung J, Grebely J, Vickerman P, Stone J, Cunningham EB, Trickey A, Dumchev K. Global prevalence of injecting drug use and sociodemographic characteristics and prevalence of HIV, HBV, and HCV in people who inject drugs: a multistage systematic review. *Lancet Glob Health*. 2017;5(12):e1192-e1207. PMID: 29074409
5. Beijer U, Wolf A, Fazel S. Prevalence of tuberculosis, hepatitis C virus, and HIV in homeless people: a systematic review and meta-analysis. *Lancet Infect Dis*. 2012;12(11):859-870. PMID: 22914343
6. Nelson PK, Mathers BM, Cowie B, Hagan H, Des Jarlais D, Horyniak D, Degenhardt L. Global epidemiology of hepatitis B and hepatitis C in people who inject drugs: results of systematic reviews. *Lancet*. 2011;378(9791):571-583. PMID: 21802134
7. Degenhardt L, Mathers B, Vickerman P, Rhodes T, Latkin C, Hickman M. Prevention of HIV infection for people who inject drugs: why individual, structural, and combination approaches are needed. *Lancet*. 2010;376(9737):285-301. PMID: 20650522
8. RachBeisel J, Scott J, Dixon L. Co-occurring severe mental illness and substance use disorders: a review of recent research. *Psychiatr Serv*. 1999;50(11):1427-34. PMID: 10543851
9. Strike C, Watson TM. Losing the uphill battle? Emergent harm reduction interventions and barriers during the opioid overdose crisis in Canada. *Int J Drug Policy*. 2019;71:178-82. PMID: 30975595
10. Tyndall M. An emergency response to the opioid overdose crisis in Canada: a regulated opioid distribution program. *CMAJ*. 2018;190(2):E35-E36. PMID: 29335260
11. Belzak L, Halverson J. The opioid crisis in Canada: a national perspective. *Health Promot Chronic Dis Prev Can*. 2018;38(6):224-33. PMID: 29911818

12. Lisa B, Jessica H. The opioid crisis in Canada: a national perspective. *Health Promot Chronic Dis Prev Can.* 2018;38(6):224. PMID: 29911818
13. Special Advisory Committee on the Epidemic of Opioid Overdoses. Opioid and stimulant-related harms in Canada. 2020. Available from: <https://health-infobase.canada.ca/substance-related-harms/opioids-stimulants/>
14. Orpana Heather M, Lang Justin J, George Diana HJ. At-a-glance - The impact of poisoning-related mortality on life expectancy at birth in Canada, 2000 to 2016. *Health Promot Chronic Dis Prev Can.* 2019;39(2):56. PMID: 30767855
15. St-Jean M, Dong X, Tafessu H, Moore D, Honer WG, Vila-Rodriguez F, Sereda P, Hogg RS, Patterson TL, Salters K. Overdose mortality is reducing the gains in life expectancy of antiretroviral-treated people living with HIV in British Columbia, Canada. *Int J Drug Policy.* 2021;103195. PMID: 33773878
16. Vu M, Li J, Haardörfer R, Windle M, Berg CJ. Mental health and substance use among women and men at the intersections of identities and experiences of discrimination: insights from the intersectionality framework. *BMC Public Health.* 2019;19(1):108. PMID: 30674293
17. Aldridge RW, Story A, Hwang SW, Nordentoft M, Luchenski SA, Hartwell G, Tweed EJ, Lewer D, Katikireddi SV, Hayward AC. Morbidity and mortality in homeless individuals, prisoners, sex workers, and individuals with substance use disorders in high-income countries: a systematic review and meta-analysis. *Lancet.* 2018;391(10117):241-50. PMID: 29137869
18. Hwang SW. Mortality among men using homeless shelters in Toronto, Ontario. *JAMA.* 2000;283(16):2152-57. PMID: 10791509
19. Cheung AM, Hwang SW. Risk of death among homeless women: a cohort study and review of the literature. *CMAJ.* 2004;170(8):1243-1247. PMID: 15078846
20. Hwang SW, Wilkins R, Tjepkema M, O'Campo PJ, Dunn JR. Mortality among residents of shelters, rooming houses, and hotels in Canada: 11 year follow-up study. *BMJ.* 2009;339:b4036. PMID: 19858533
21. Hwang SW, Colantonio A, Chiu S, Tolomiczenko G, Kiss A, Cowan L, Redelmeier DA, Levinson W. The effect of traumatic brain injury on the health of homeless people. *CMAJ.* 2008;179(8):779-84. PMID: 18838453
22. Laslett AM, Dietze P, Dwyer R. The oral health of street-recruited injecting drug users: prevalence and correlates of problems. *Addiction.* 2008;103(11):1821-25. PMID: 19032532

23. Hendricks K, Gorbach S. Nutrition issues in chronic drug users living with HIV infection. *Addict Sci Clin Pract.* 2009;5(1):16-23. PMID: 19369915
24. Vogenthaler NS, Hadley C, Lewis SJ, Rodriguez AE, Metsch LR, Del Rio C. Food insufficiency among HIV-infected crack-cocaine users in Atlanta and Miami. *Public Health Nutr.* 2010;13(9):1478-84. PMID: 20074395
25. Lloyd-Smith E, Kerr T, Hogg RS, Li K, Montaner JS, Wood E. Prevalence and correlates of abscesses among a cohort of injection drug users. *Harm Reduct J.* 2005;2(1):24. PMID: 16281979
26. Baggett TP, Chang Y, Singer DE, Porneala BC, Gaeta JM, O'Connell JJ, Rigotti NA. Tobacco-, alcohol-, and drug-attributable deaths and their contribution to mortality disparities in a cohort of homeless adults in Boston. *Am J Public Health.* 2015;105(6):1189-97. PMID: 25521869
27. DeBeck K, Kerr T, Li K, Fischer B, Buxton J, Montaner J, Wood E. Smoking of crack cocaine as a risk factor for HIV infection among people who use injection drugs. *CMAJ.* 2009;181(9):585-9. PMID: 19841052
28. Tyndall MW, Currie S, Spittal P, Li K, Wood E, O'Shaughnessy MV, Schechter MT. Intensive injection cocaine use as the primary risk factor in the Vancouver HIV-1 epidemic. *AIDS.* 2003;17(6):887-93. PMID: 12660536
29. Hagan H. Hepatitis C virus transmission dynamics in injection drug users. *Subst Use Misuse.* 1998;33(5):1197-1212. PMID: 9596383
30. Allen DM, Lehman JS, Green TA, Lindegren ML, Onorato IM, Forrester W. HIV infection among homeless adults and runaway youth, United States, 1989–1992. *AIDS.* 1994; 8(11):1593-8. PMID: 7848596
31. Estebanez PE, Russell NK, Aguilar MD, Béland F, Zunzunegui MV. Women, drugs and HIV/AIDS: results of a multicentre European study. *Int J Epidemiol.* 2000;29(4):734-43. PMID: 10922353
32. Sherriff LC, Mayon-White R. A survey of hepatitis C prevalence amongst the homeless community of Oxford. *J Public Health Med.* 2003;25(4):358-61. PMID: 14747596
33. Urbanoski KA. Need for equity in treatment of substance use among Indigenous people in Canada. *CMAJ.* 2017;189(44):E1350-E1351. PMID: 29109207
34. Firestone M, Tyndall M, Fischer B. Substance use and related harms among aboriginal people in Canada: a comprehensive review. *J Health Care Poor Underserved.* 2015;26(4):1110-31. PMID: 26548667

35. Khenti A. The Canadian war on drugs: Structural violence and unequal treatment of Black Canadians. *Int J Drug Policy*. 2014;25(2):190-5. PMID: 24418631
36. Lebrun LA, LaVeist TA. Health status among black Canadians: results from a national survey. *Can Ethn Stud*. 2013;45(1):143-155. DOI: 10.1353/ces.2013.0016
37. Friedman SR, Cooper HL, Osborne AH. Structural and social contexts of HIV risk among African Americans. *Am J Public Health*. 2009;99(6):1002-8. PMID: 19372519
38. Adelson N. The embodiment of inequity: Health disparities in Aboriginal Canada. *Can J Public Health*. 2005;96(2):S45-61. PMID: 16078555
39. Wood E, Montaner JS, Li K, Zhang R, Barney L, Strathdee SA, Tyndall MW, Kerr T. Burden of HIV infection among aboriginal injection drug users in Vancouver, British Columbia. *Am J Public Health*. 2008;98(3):515-9. PMID: 18235063
40. Duncan KC, Reading C, Borwein AM, Murray MC, Palmer A, Michelow W, Samji H, Lima VD, Montaner JS, Hogg RS. HIV incidence and prevalence among Aboriginal peoples in Canada. *AIDS Behav*. 2011; 15(1):214-27. PMID: 20799061
41. Statistics Canada. Aboriginal peoples in Canada: key results from the 2016 census. 2017. Available from: <https://www150.statcan.gc.ca/n1/daily-quotidien/171025/dq171025a-eng.htm>
42. Lavalley J, Kastor S, Valleriani J, McNeil R. Reconciliation and Canada's overdose crisis: responding to the needs of Indigenous Peoples. *CMAJ*. 2018;190(50):E1466-E1467. PMID: 30559278
43. Government of Alberta. Alberta opioid response surveillance report: First Nations People in Alberta. 2019. Available from: <https://www.alberta.ca/assets/documents/health-first-nations-opioid-surveillance.pdf>
44. First Nations Health Authority. First Nations opioid overdose deaths rise in 2018. 2019. Available from: <https://www.fnha.ca/about/news-and-events/news/first-nations-opioid-overdose-deaths-rise-in-2018#:~:text=In%202018%2C%20193%20First%20Nations,from%2011%20percent%20in%202017.>
45. Johnston G. The kids are all white: examining race and representation in news media coverage of opioid overdose deaths in Canada. *Sociol Inq*. 2020;90(1):123-46. DOI: 10.1111/soin.12269
46. James K, Jordan A. The opioid crisis in black communities. *J Law Med Ethics*. 2018;46(2):404-21. PMID: 30146996

47. Miller CL, Kerr T, Strathdee SA, Li K, Wood E. Factors associated with premature mortality among young injection drug users in Vancouver. *Harm Reduct J.* 2007;4(1):1. PMID: 17201933
48. Jenkins EK, Slemon A, Haines-Saah RJ. Developing harm reduction in the context of youth substance use: insights from a multi-site qualitative analysis of young people's harm minimization strategies. *Harm Reduct J.* 2017;14(1):53. PMID: 28760146
49. Iversen J, Page K, Madden A, Maher L. HIV, HCV and health-related harms among women who inject drugs: implications for prevention and treatment. *J Acquir Immune Defic Syndr.* 2015;69(0 1):S176-81. PMID: 25978485
50. United Nations Office of Drugs and Crime. Women and drugs: drug use, drug supply and their consequences. 2018. Available from: <https://reliefweb.int/report/world/unodc-world-drug-report-2018>
51. Mereish EH, Bradford JB. Intersecting identities and substance use problems: Sexual orientation, gender, race, and lifetime substance use problems. *J Stud Alcohol Drugs.* 2014;75(1):179-88. PMID: 24411810
52. Mistry R, Heinze JE, Cordova D, Heish H-F, Goldstick JE, Ayer SM, Zimmerman MA. Transitions in current substance use from adolescence to early-adulthood. *J Youth Adolesc.* 2015;44(10):1871-83. PMID: 26036994
53. World Health Organization. Harm reduction. 2020. Available from <http://www.euro.who.int/en/health-topics/communicable-diseases/hiv-aids/policy/policy-guidance-for-areas-of-intervention/harm-reduction>
54. Bourgois P, Hart L. The structural vulnerability imposed by hypersegregated US inner-city neighborhoods—a theoretical and practical challenge for substance abuse research. *Addiction.* 2011;106(11):1975-7. PMID: 21978310
55. Bourgois P, Holmes SM, Sue K, Quesada J. Structural vulnerability: operationalizing the concept to address health disparities in clinical care. *Acad Med.* 2017;92(3):299-307. PMID: 27415443
56. Kolla G, Strike C. 'It's too much, I'm getting really tired of it': overdose response and structural vulnerabilities among harm reduction workers in community settings. *Int J Drug Policy.* 2019;74:127-135. PMID: 31590088
57. Bardwell G, Boyd J, Tupper KW, Kerr T. "We don't got that kind of time, man. We're trying to get high!": exploring potential use of drug checking technologies among structurally vulnerable people who use drugs. *Int J Drug Policy.* 2019;71:125-132. PMID: 31336258

58. Rhodes T. Risk environments and drug harms: a social science for harm reduction approach. *Int J Drug Policy*. 2009;20(3):193-201. PMID: 19147339
59. Rhodes T. The 'risk environment': a framework for understanding and reducing drug-related harm. *Int J Drug Policy*. 2002;13(2):85-94. DOI: 10.1016/S0955-3959(02)00007-5
60. Kellen A, Powers L, Birnbaum R. Drug use, addiction, and the criminal justice system. Responding to the oppression of addiction: Canadian social work perspectives. 201;260-94.
61. Gordon T. Neoliberalism, racism, and the war on drugs in Canada. *Soc Justic*. 2006;33(1 (103):59-78. Available from: <https://www.jstor.org/stable/29768352>
62. Carstairs C. *Jailed for possession: illegal drug use, regulation, and power in Canada, 1920-1961*, vol. 26: University of Toronto Press; 2006.
63. Axford M. *Homicide, sex, robbery and drug offenders in federal corrections: an end-of-2008 review*. Correctional Service of Canada Ottawa; 2011.
64. Csete J, Kamarulzaman A, Kazatchkine M, Altice F, Balicki M, Buxton J, Cepeda J, Comfort M, Goosby E, Goulão J, et al. Public health and international drug policy. *Lancet*. 2016;387(10026):1427-1480. PMID: 27021149
65. Wortley S, Owusu-Bempah A. The usual suspects: Police stop and search practices in Canada. *Policing Soc*. 2011;21(4):395-407. DOI: 10.1080/10439463.2011.610198
66. Wood K. The social determinants of substance abuse: the social and economic causes of substance abuse disorders and implications for international human rights. 2012. Available from: <https://ruor.uottawa.ca/bitstream/10393/23881/1/WOOD%2C%20Kate%2020125.pdf>
67. Richardson LA, Long C, DeBeck K, Nguyen P, Milloy MS, Wood E, Kerr TH. Socioeconomic marginalisation in the structural production of vulnerability to violence among people who use illicit drugs. *J Epidemiol Community Health*. 2015;69(7):686-92. PMID: 25691275
68. Krug EG, Mercy JA, Dahlberg LL, Zwi AB. The world report on violence and health. *Lancet*. 2002;360(9339):1083-8. PMID: 12384003
69. Rutherford A, Zwi AB, Grove NJ, Butchart A. Violence: a priority for public health? (part 2). *J Epidemiol Community Health*. 2007;61(9):764-70. PMID: 17699529
70. Surratt HL, Inciardi JA, Kurtz SP, Kiley MC. Sex work and drug use in a subculture of violence. *Crime Delinq*. 2004;50(1):43-59. DOI: 10.1177/00111287032258875

71. McKenna SA. Navigating the risk environment: structural vulnerability, sex, and reciprocity among women who use methamphetamine. *Int J Drug Policy*. 2014;25(1):112-5. PMID: 24140170
72. Newcomb ME, Hill R, Buehler K, Ryan DT, Whitton SW, Mustanski B. High burden of mental health problems, substance use, violence, and related psychosocial factors in transgender, non-binary, and gender diverse youth and young adults. *Arch Sex Behav*. 2020;49(2):645-59. PMID: 31485801
73. Brennan J, Kuhns LM, Johnson AK, Belzer M, Wilson EC, Garofalo R, Adolescent Medicine Trials Network for HIV/AIDS Interventions. Syndemic theory and HIV-related risk among young transgender women: the role of multiple, co-occurring health problems and social marginalization. *Am J Public Health*. 2012;102(9):1751-7. PMID: 22873480
74. Rhodes T, Wagner K, Strathdee SA, Shannon K, Davidson P, Bourgois P: Structural violence and structural vulnerability within the risk environment: theoretical and methodological perspectives for a social epidemiology of HIV risk among injection drug users and sex workers. In: *Rethinking social epidemiology*. edn.: Springer; 2012: 205-230.
75. Moore D, Dietze P. Enabling environments and the reduction of drug-related harm: re-framing Australian policy and practice. *Drug Alcohol Rev*. 2005;24(3):275-84. PMID: 16096131
76. Bourgois P, Bourgois PI, Schonberg J. *Righteous dopefiend*, vol. 21: University of California Press; 2009.
77. Galabuzi G-E. Social exclusion. *Social determinants of health: Canadian perspectives* 2004:235-251.
78. Waldram JB, Herring A, Young TK. *Aboriginal health in Canada: historical, cultural, and epidemiological perspectives*: University of Toronto Press; 2006.
79. Bombay A, Matheson K, Anisman H. *Origins of lateral violence in Aboriginal communities. A preliminary study of student-to-student abuse in residential schools*: Aboriginal Healing Foundation; 2014. Available from: <https://www.ahf.ca/downloads/lateral-violence-english.pdf>
80. Trocmé N, Knoke D, Blackstock C. Pathways to the overrepresentation of Aboriginal children in Canada's child welfare system. *Social Serv Rev*. 2004;78(4):577-600.
81. Gracey M, King M. Indigenous health part 1: determinants and disease patterns. *Lancet*. 2009;374(9683):65-75. PMID: 19577695
82. King M, Smith A, Gracey M. Indigenous health part 2: the underlying causes of the health gap. *Lancet*. 2009;374(9683):76-85. PMID: 19577696

83. Rodney P, Copeland E. The health status of black Canadians: do aggregated racial and ethnic variables hide health disparities? *J Health Care Poor Underserved*. 2009;20(3):817-23. PMID: 19648707
84. Abdillahi I, Shaw A. Social determinants and inequities in health for Black Canadians: a snapshot. Public Health Agency of Canada; 2020. Available from: <https://www.canada.ca/en/public-health/services/health-promotion/population-health/what-determines-health/social-determinants-inequities-black-canadians-snapshot.html>
85. Dunlap E, Johnson BD, Kotarba JA, Fackler JL. Macro-level social forces and micro-level consequences: poverty, alternate occupations, and drug dealing. *J Ethn Subst Abuse*. 2010;9(2):115-27. PMID: 20509085
86. Karriker-Jaffe KJ. Areas of disadvantage: a systematic review of effects of area-level socioeconomic status on substance use outcomes. *Drug Alcohol Rev*. 2011;30(1):84-95. PMID: 21219502
87. Boardman JD, Finch BK, Ellison CG, Williams DR, Jackson JS. Neighborhood disadvantage, stress, and drug use among adults. *J Health Soc Behav*. 2001:151-65. PMID: 11467250
88. Romley JA, Cohen D, Ringel J, Sturm R. Alcohol and environmental justice: the density of liquor stores and bars in urban neighborhoods in the United States. *J Stud Alcohol Drugs*. 2007;68(1):48-55. PMID 17149517
89. Hay GC, Whigham PA, Kypri K, Langley JD. Neighbourhood deprivation and access to alcohol outlets: a national study. *Health Place*. 2009;15(4):1086-93. PMID: 19540790
90. Hsieh C-C, Pugh MD. Poverty, income inequality, and violent crime: a meta-analysis of recent aggregate data studies. *Criminal Just Rev*. 1993;18(2):182-202.
91. Hughes K, Bellis MA, Hardcastle KA, Sethi D, Butchart A, Mikton C, Jones L, Dunne MP. The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis. *Lancet Public Health*. 2017;2(8):e356-e366. PMID: 29253477
92. Room R. Stigma, social inequality and alcohol and drug use. *Drug Alcohol Rev*. 2005;24(2):143-155. PMID: 16076584
93. Slaymaker VJ. Occupational impact of drug abuse and addiction. In: *Drug Abuse and Addiction in Medical Illness*. edn.: Springer; 2012: 511-521.
94. Henkel D. Unemployment and substance use: a review of the literature (1990-2010). *Curr Drug Abuse Rev*. 2011;4(1):4-27. PMID 21466502

95. Corrigan PW, Nieweglowski K. Stigma and the public health agenda for the opioid crisis in America. *Int J Drug Policy*. 2018;59:44-9. PMID: 29986271
96. Pager D. The mark of a criminal record. *Am J Sociol*. 2003;108(5):937-975.
97. Foster WH, Vaughan RD. Absenteeism and business costs: does substance abuse matter? *J Subst Abuse Treat*. 2005;28(1):27-33. PMID: 15723729
98. Welsh JW, Shentu Y, Boyd JW. Substance use disorders. In: *Mental Health in the Workplace*. edn.: Springer; 2019: 131-144.
99. Reynolds GS, Lehman WE. Levels of substance use and willingness to use the employee assistance program. *J Behav Health Serv Res*. 2003;30(2):238-48. PMID: 12710376
100. Cooke M, Gazso A. Taking a life course perspective on social assistance use in Canada: a different approach. *Can J Sociol*. 2009;34(2). DOI: 10.2307/canajsocicahican.34.2.349
101. Hogan SR, Unick GJ, Speiglmann R, Norris JC. Social welfare policy and public assistance for low-income substance abusers: the impact of 1996 welfare reform legislation on the economic security of former Supplemental Security Income drug addiction and alcoholism beneficiaries. *J Sociol Soc Welf*. 2008;35(1):221-245. PMID: 20396645
102. Riley ED, Neilands TB, Moore K, Cohen J, Bangsberg DR, Havlir D. Social, structural and behavioral determinants of overall health status in a cohort of homeless and unstably housed HIV-infected men. *PloS One*. 2012;7(4):e35207. PMID: 22558128
103. Galea S, Vlahov D. Social determinants and the health of drug users: socioeconomic status, homelessness, and incarceration. *Publ Health Rep*. 2002;117(Suppl 1):S135. PMID: 12435837
104. Weiser SD, Frongillo EA, Ragland K, Hogg RS, Riley ED, Bangsberg DR. Food insecurity is associated with incomplete HIV RNA suppression among homeless and marginally housed HIV-infected individuals in San Francisco. *J Gen Intern Med*. 2009;24(1):14-20. PMID: 18953617
105. Baggett TP, Singer DE, Rao SR, O'Connell JJ, Bharel M, Rigotti NA. Food insufficiency and health services utilization in a national sample of homeless adults. *J Gen Intern Med*. 2011;26(6):627-34. PMID: 21279455
106. Gomez R, Thompson SJ, Barczyk AN. Factors associated with substance use among homeless young adults. *Subst Abus*. 2010;31(1):24-34. PMID: 20391267
107. Palepu A, Gadermann A, Hubley AM, Farrell S, Gogosis E, Aubry T, Hwang SW. Substance use and access to health care and addiction treatment among homeless and

- vulnerably housed persons in three Canadian cities. *PloS One*. 2013;8(10):e75133. PMID: 24124470
108. Hwang SW. Homelessness and health. *CMAJ*. 2001;164(2):229-33.
 109. Dickson-Gomez J, Convey M, Hilario H, Corbett AM, Weeks M. Unofficial policy: access to housing, housing information and social services among homeless drug users in Hartford, Connecticut. *Subst Abuse Treat Prev Policy*. 2007;2(1):8. PMID: 17343735
 110. Mavromaras K, King D, Macaitis K, Mallett S, Batterham D. Finding work: homelessness and employment. Department of Families, Housing, Community Services and Indigenous Affairs 2011. Available from: <https://cms.launchhousing.org.au/app/uploads/2011/04/Finding-Work-Homelessness-and-Employment-Research.pdf>
 111. Gaetz S. The criminalization of homelessness: a Canadian perspective. *Euro J Homeless*. 2013;7(2). Available from: https://www.feantsaresearch.org/download/sg_response7772916537698278481.pdf
 112. Abdjalieva E, Wyly E. Homeless city: body politics and the urbanization of capital. *TRAILSIX*. 2012;7:1-10. Available from: <http://trailsix.sites.olt.ubc.ca/files/2017/03/Volume-7-Trail-Six.pdf#page=8>
 113. Collins D, Blomley N. Politics, poverty, and anti-panhandling by-laws in Canadian cities. *New Perspectives on the Public-Private Divide*. UBC Press. 2003;40.
 114. Safe Streets Act. In: SBC 2004. vol. Chapter 75; 2004. Available from: http://www.bclaws.ca/Recon/document/ID/freeside/00_04075_01
 115. Safe Streets Act. In: SO 1999, c 8. 1999. Available from: http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_99s08_e.htm
 116. Kerr T, Fairbairn N, Tyndall M, Marsh D, Li K, Montaner J, Wood E. Predictors of non-fatal overdose among a cohort of polysubstance-using injection drug users. *Drug Alcohol Depend*. 2007;87(1):39-45. PMID: 16959438
 117. Howe CJ, Fuller CM, Ompad DC, Galea S, Koblin B, Thomas D, Vlahov D. Association of sex, hygiene and drug equipment sharing with hepatitis C virus infection among non-injecting drug users in New York City. *Drug Alcohol Depend*. 2005;79(3):389-95. PMID: 16102381
 118. Small W, Rhodes T, Wood E, Kerr T. Public injection settings in Vancouver: physical environment, social context and risk. *Int J Drug Policy*. 2007;18(1):27-36. PMID: 17689341

119. Cooper H, Moore L, Gruskin S, Krieger N. The impact of a police drug crackdown on drug injectors' ability to practice harm reduction: a qualitative study. *Soc Sci Med.* 2005;61(3):673-684. PMID: 15899325
120. Werb D, Wood E, Small W, Strathdee S, Li K, Montaner J, Kerr T. Effects of police confiscation of illicit drugs and syringes among injection drug users in Vancouver. *Int J Drug Policy.* 2008;19(4):332-8. PMID: 17900888
121. Dovey K, Fitzgerald J, Choi Y. Safety becomes danger: dilemmas of drug-use in public space. *Health Place.* 2001;7(4):319-31. PMID: 11682331
122. Crenshaw K. Mapping the margins: intersectionality, identity politics, and violence against women of color. *Stan L Rev.* 1990;43:1241.
123. Bowleg L. The problem with the phrase women and minorities: intersectionality—an important theoretical framework for public health. *Am J Public Health.* 2012;102(7):1267-73. PMID: 22594719
124. Bauer GR. Incorporating intersectionality theory into population health research methodology: challenges and the potential to advance health equity. *Soc Sci Med.* 2014;110:10-7. PMID: 24704889
125. Demant D, Oviedo-Trespalacios O, Carroll J-A, Ferris JA, Maier L, Barratt MJ, Winstock AR. Do people with intersecting identities report more high-risk alcohol use and lifetime substance use? *Int J Public Health.* 2018;63(5):621-30. PMID: 29605878
126. McNeil R, Kerr T, Anderson S, Maher L, Keewatin C, Milloy M, Wood E, Small W. Negotiating structural vulnerability following regulatory changes to a provincial methadone program in Vancouver, Canada: a qualitative study. *Soc Sci Med.* 2015;133:168-76. PMID: 25875323
127. Bardwell G, Anderson S, Richardson L, Bird L, Lampkin H, Small W, McNeil R. The perspectives of structurally vulnerable people who use drugs on volunteer stipends and work experiences provided through a drug user organization: opportunities and limitations. *Int J Drug Policy.* 2018;55:40-46. PMID: 29501928
128. Boyd J, Richardson L, Anderson S, Kerr T, Small W, McNeil R. Transitions in income generation among marginalized people who use drugs: a qualitative study on recycling and vulnerability to violence. *Int J Drug Policy.* 2018;59:36-43. PMID: 29986270
129. Quesada J, Hart LK, Bourgois P. Structural vulnerability and health: Latino migrant laborers in the United States. *Med Anthropol.* 2011;30(4):339-362. PMID: 21777121
130. Dovidio JF, Fiske ST. Under the radar: how unexamined biases in decision-making processes in clinical interactions can contribute to health care disparities. *Am J Public Health.* 2012;102(5):945-52. PMID: 22420809

131. Willen SS. How is health-related “deservingness” reckoned? Perspectives from unauthorized im/migrants in Tel Aviv. *Soc Sci Med.* 2012;74(6):812-21. PMID: 21821324
132. Higashi RT, Tillack A, Steinman MA, Johnston CB, Harper GM. The ‘worthy’ patient: rethinking the ‘hidden curriculum’ in medical education. *Anthropol Med.* 2013;20(1):13-23. PMID: 23581400
133. Dixon-Woods M, Cavers D, Agarwal S, Annandale E, Arthur A, Harvey J, Hsu R, Katbamna S, Olsen R, Smith L, et al. Conducting a critical interpretive synthesis of the literature on access to healthcare by vulnerable groups. *BMC Med Res Methodol.* 2006;6(1):35. PMID: 16872487
134. Alegría M, Alvarez K, Falgas-Bague I. Clinical care across cultures: what helps, what hinders, what to do. *JAMA Psychiatry.* 2017;74(9):865-6. PMID: 28746720
135. Thompson-Lastad A, Yen IH, Fleming MD, Van Natta M, Rubin S, Shim JK, Burke NJ. Defining trauma in complex care management: safety-net providers' perspectives on structural vulnerability and time. *Soc Sci Med.* 2017;186:104-112. PMID: 28618290
136. Trinh-Shevrin C, Taher M, Islam N. Community health workers as accelerators of community engagement and structural competency in health. In: *Structural Competency in Mental Health and Medicine.* edn.: Springer. 2019;167-177.
137. Metzl JM, Hansen H. Structural competency: theorizing a new medical engagement with stigma and inequality. *Soc Sci Med.* 2014;103:126-133. PMID: 24507917
138. Campinha-Bacote J. The process of cultural competence in the delivery of healthcare services: a model of care. *J Transcult Nurs.* 2002;13(3):181-4. PMID: 12113146
139. Coetzee B, Kagee A, Vermeulen N. Structural barriers to adherence to antiretroviral therapy in a resource-constrained setting: the perspectives of health care providers. *AIDS Care.* 2011;23(2):146-51. PMID: 21259126
140. Fleming MD, Shim JK, Yen IH, Thompson-Lastad A, Rubin S, Van Natta M, Burke NJ. Patient engagement at the margins: health care providers' assessments of engagement and the structural determinants of health in the safety-net. *Soc Sci Med.* 2017;183:11-18. PMID: 28445806
141. Ritter A. Priority areas in illicit drug policy: perspectives of policy makers. *Drug Policy Modelling Program: Monograph 15; 2007.* Available from: <https://core.ac.uk/download/pdf/34719064.pdf>
142. Jürgens R, Csete J, Amon JJ, Baral S, Beyrer C. People who use drugs, HIV, and human rights. *Lancet.* 2010;376(9739):475-85. PMID: 20650514

143. Rehm J, Gnam W, Popova S, Baliunas D, Brochu S, Fischer B, Patra J, Sarnocinska-Hart A, Taylor B. The costs of alcohol, illegal drugs, and tobacco in Canada, 2002. *J Stud Alcohol Drugs*. 2007;68(6):886-95. PMID: 17960307
144. Canadian Institute for Health Information. Common challenges, shared priorities: measuring access to home and community care and to mental health and addictions services in Canada; 2019. Available from: <https://www.cihi.ca/sites/default/files/document/shp-companion-report-en.pdf>
145. Doran KM, Kunzler NM, Mijanovich T, Lang SW, Rubin A, Testa PA, Shelley D. Homelessness and other social determinants of health among emergency department patients. *J Soc Distress Homeless*. 2016;25(2):71-77. DOI: 10.1080/10530789.2016.1237699
146. Schanzer B, Dominguez B, ShROUT PE, Caton CL. Homelessness, health status, and health care use. *Am J Public Health*. 2007;97(3):464-469. PMID: 17267724
147. Kushel MB, Perry S, Bangsberg D, Clark R, Moss AR. Emergency department use among the homeless and marginally housed: results from a community-based study. *Am J Public Health*. 2002;92(5):778-84. PMID: 11988447
148. Kushel MB, Vittinghoff E, Haas JS. Factors associated with the health care utilization of homeless persons. *JAMA*. 2001;285(2):200-6. PMID: 11176814
149. Doran KM, Rahai N, McCormack RP, Milian J, Shelley D, Rotrosen J, Gelberg L. Substance use and homelessness among emergency department patients. *Drug Alcohol Depend*. 2018;188:328-333. PMID: 29852450
150. Ku BS, Scott KC, Kertesz SG, Pitts SR. Factors associated with use of urban emergency departments by the US homeless population. *Public Health Rep*. 2010;125(3):398-405. PMID: 20433034
151. Anderson ES, Hsieh D, Alter HJ. Social emergency medicine: embracing the dual role of the emergency department in acute care and population health. *Ann Emerg Med*. 2016;68(1):21-5. PMID: 26921967
152. Billings J, Raven MC. Dispelling an urban legend: frequent emergency department users have substantial burden of disease. *Health Aff*. 2013;32(12):2099-108. PMID: 24201392
153. Mandelberg JH, Kuhn RE, Kohn MA. Epidemiologic analysis of an urban, public emergency department's frequent users. *Acad Emerg Med*. 2000;7(6):637-646. PMID: 10905642
154. Morris DM, Gordon JA. The role of the emergency department in the care of homeless and disadvantaged populations. *Emerg Med Clin North Am*. 2006;24(4):839-48. PMID: 16982342

155. Chadwick A, Street C, McAndrew S, Deacon M. Minding our own bodies: Reviewing the literature regarding the perceptions of service users diagnosed with serious mental illness on barriers to accessing physical health care. *Int J Ment Health Nurs*. 2012;21(3):211-9. PMID: 22533328
156. Ross LE, Vigod S, Wishart J, Waese M, Spence JD, Oliver J, Chambers J, Anderson S, Shields R. Barriers and facilitators to primary care for people with mental health and/or substance use issues: a qualitative study. *BMC Fam Pract*. 2015;16(1):135. PMID: 26263083
157. Ahern J, Stuber J, Galea S. Stigma, discrimination and the health of illicit drug users. *Drug Alcohol Depend*. 2007;88(2):188-196. PMID: 17118578
158. McNeil R, Small W, Wood E, Kerr T. Hospitals as a 'risk environment': an ethno-epidemiological study of voluntary and involuntary discharge from hospital against medical advice among people who inject drugs. *Soc Sci Med*. 2014;105:59-66. PMID: 23508718
159. Bonnie Nickasch R. Healthcare experiences of the homeless. *J Am Acad Nurse Pract*. 2009;21(1):39. PMID: 19125894
160. Rae BE, Rees S. The perceptions of homeless people regarding their healthcare needs and experiences of receiving health care. *J Adv Nurs*. 2015;71(9):2096-107. PMID: 25916241
161. Carusone SC, Guta A, Robinson S, Tan DH, Cooper C, O'Leary B, de Prinse K, Cobb G, Upshur R, Strike C. "Maybe if I stop the drugs, then maybe they'd care?"—hospital care experiences of people who use drugs. *Harm Reduct J*. 2019;16(1):16. PMID: 30760261
162. Wen CK, Hudak PL, Hwang SW. Homeless people's perceptions of welcomeness and unwelcomeness in healthcare encounters. *J Gen Intern Med*. 2007;22(7):1011-7. PMID: 17415619
163. Grech E, Raeburn T. Experiences of hospitalised homeless adults and their health care providers in OECD nations: a literature review. *Collegian*. 2019;26(1):204-211. DOI: 10.1016/j.colegn.2018.04.004
164. Pauly BB, McCall J, Browne AJ, Parker J, Mollison A. Toward cultural safety. *Adv Nurs Sci*. 2015;38(2):121-35. PMID: 25932819
165. Hyshka E, Morris H, Anderson-Baron J, Nixon L, Dong K, Salvalaggio G. Patient perspectives on a harm reduction-oriented addiction medicine consultation team implemented in a large acute care hospital. *Drug Alcohol Depend*. 2019;204:107523. PMID: 31541875

166. Van Boekel LC, Brouwers EP, Van Weeghel J, Garretsen HF. Stigma among health professionals towards patients with substance use disorders and its consequences for healthcare delivery: systematic review. *Drug Alcohol Depend.* 2013;131(1-2):23-35. PMID: 23490450
167. van Boekel LC, Brouwers EP, van Weeghel J, Garretsen HF. Healthcare professionals' regard towards working with patients with substance use disorders: comparison of primary care, general psychiatry and specialist addiction services. *Drug Alcohol Depend.* 2014;134:92-8. PMID: 24099970
168. van Boekel LC, Brouwers EP, van Weeghel J, Garretsen HF. Comparing stigmatising attitudes towards people with substance use disorders between the general public, GPs, mental health and addiction specialists and clients. *Int J Soc Psychiatry.* 2015;61(6):539-49. PMID: 25500945
169. Paquette CE, Syvertsen JL, Pollini RA. Stigma at every turn: Health services experiences among people who inject drugs. *Int J Drug Policy.* 2018;57:104-110. PMID: 29715589
170. Peckover S, Chidlaw RG. Too frightened to care? Accounts by district nurses working with clients who misuse substances. *Health Soc Care Community.* 2007;15(3):238-45. PMID: 17444987
171. Monks R, Topping A, Newell R. The dissonant care management of illicit drug users in medical wards, the views of nurses and patients: a grounded theory study. *J Adv Nurs.* 2013;69(4):935-46. PMID: 22776007
172. Salvalaggio G, McKim R, Taylor M, Wild TC. Patient-provider rapport in the health care of people who inject drugs. *Sage Open.* 2013;3(4):2158244013509252. DOI: 10.1177/2158244013509252
173. da Silveira PS, de Tostes JGA, Wan HT, Ronzani TM, Corrigan PW. The stigmatization of drug use as mechanism of legitimation of exclusion. *Drugs and Social Context.* edn.: Springer; 2018:15-25.
174. Treloar C, Rance J, Yates K, Mao L. Trust and people who inject drugs: The perspectives of clients and staff of Needle Syringe Programs. *Int J Drug Policy.* 2016;27:138-45. PMID: 26394538
175. Merrill JO, Rhodes LA, Deyo RA, Marlatt GA, Bradley KA. Mutual mistrust in the medical care of drug users. *J Gen Intern Med.* 2002;17(5):327-33. PMID: 12047728
176. Chang J, Dubbin L, Shim J. Negotiating substance use stigma: the role of cultural health capital in provider-patient interactions. *Sociol Health Illn.* 2016;38(1):90-108. PMID: 26382837

177. Hauff AJ, Secor-Turner M. Homeless health needs: shelter and health service provider perspective. *J Community Health Nurs.* 2014;31(2):103-17. PMID: 24788048
178. Pauly BB. Shifting moral values to enhance access to health care: Harm reduction as a context for ethical nursing practice. *I J Drug Policy.* 2008;19(3):195-204. PMID: 18467086
179. Ti L, Milloy M, Buxton J, McNeil R, Dobrer S, Hayashi K, Wood E, Kerr T. Factors associated with leaving hospital against medical advice among people who use illicit drugs in Vancouver, Canada. *PloS One.* 2015;10(10):e0141594. PMID: 26509447
180. Alfandre DJ. "I'm going home": discharges against medical advice. *Mayo Clinic Proceedings.* 2009;255-260. DOI: 10.4065/84.3.255
181. Choi M, Kim H, Qian H, Palepu A. Readmission rates of patients discharged against medical advice: a matched cohort study. *PloS One* 2011;6(9):e24459. PMID: 21931723
182. Southern WN, Nahvi S, Arnsten JH. Increased risk of mortality and readmission among patients discharged against medical advice. *Am J Med.* 2012;125(6):594-602. PMID: 22513194
183. Yong T, Fok J, Hakendorf P, Ben-Tovim D, Thompson C, Li J. Characteristics and outcomes of discharges against medical advice among hospitalised patients. *Intern Med J.* 2013;43(7):798-802. PMID: 23461391
184. Baum FE, Bégin M, Houweling TA, Taylor S. Changes not for the fainthearted: reorienting health care systems toward health equity through action on the social determinants of health. *Am J Public Health.* 2009;99(11):1967-74. PMID: 19762660
185. Niederdeppe J, Bu QL, Borah P, Kindig DA, Robert SA. Message design strategies to raise public awareness of social determinants of health and population health disparities. *Milbank Q.* 2008;86(3):481-513. PMID: 18798887
186. Malecha PW, Williams JH, Kunzler NM, Goldfrank LR, Alter HJ, Doran KM. Material needs of emergency department patients: a systematic review. *Acad Emerg Med.* 2018;25(3):330-59. PMID: 29266523
187. Gordon JA, Chudnofsky CR, Hayward RA. Where health and welfare meet: Social deprivation among patients in the emergency department. *J Urban Health.* 2001;78(1):104-11. PMID: 11368190
188. Bisgaier J, Rhodes KV. Cumulative adverse financial circumstances: associations with patient health status and behaviors. *Health Soc Work.* 2011;36(2):129-37. PMID: 21661302

189. Rodriguez RM, Fortman J, Chee C, Ng V, Poon D. Food, shelter and safety needs motivating homeless persons' visits to an urban emergency department. *Ann Emerg Med.* 2009;53(5):598-602. PMID: 18838193
190. Kosteniuk BM. Responding to illegal drug use in acute care: patient needs and perspectives. MSc thesis, University of Alberta, Edmonton 2020.
191. Dong K, Cooper R, Salvalaggio G, Newton A, Wild T, Vandenberghe C. Needs assessment survey of homeless and/or substance using adults presenting to the emergency department. *Can J Emerg Med.* 2013;15(1S):S71.
192. Salvalaggio G, Dong KA, Hyshka E, Nixon L, Lavergne KJ, Nichols J, Louis M, Lockerbie SL, Bristowe M, Leske J. Enhanced multidisciplinary care for inner city patients with high acute care use: study protocol. *Can J Addict.* 2016;7(3):34-41.
193. Jackson LA, McWilliam S, Martin F, Dingwell J, Dykeman M, Gahagan J, Karabanow J. Key challenges in providing services to people who use drugs: the perspectives of people working in emergency departments and shelters in Atlantic Canada. *Drugs.* 2014;21(3):244-53. PMID: 24954982
194. Moore M, Cristofalo M, Dotolo D, Torres N, Lahdya A, Ho L, Vogel M, Forrester M, Conley B, Fouts S. When high pressure, system constraints, and a social justice mission collide: A socio-structural analysis of emergency department social work services. *Soc Sci Med.* 2017;178:104-14. PMID: 28214722
195. Raven MC, Carrier ER, Lee J, Billings JC, Marr M, Gourevitch MN. Substance use treatment barriers for patients with frequent hospital admissions. *J Subst Abuse Treat.* 2010;38(1):22-30. PMID: 19540700
196. Glass RI, Mulvihill MN, Smith H, Jr., Peto R, Bucheister D, Stoll BJ. The 4 score: an index for predicting a patient's non-medical hospital days. *Am J Public Health.* 1977;67(8):751-5. PMID: 888992
197. Zimmer JG. Length of stay and hospital bed misutilization. *Med Care.* 1974;453-462. PMID: 4828928
198. Lechman C, Duder S. Hospital length of stay: social work services as an important factor. *Soc Work Health Care.* 2009;48(5):495-504. PMID 19806709
199. Lechman C, Duder S. Psychosocial severity, length of stay and the role of social work services. *Soc Work Health Care.* 2006;43(4):1-13. PMID: 16966306
200. Keefler J, Duder S, Lechman C. Predicting length of stay in an acute care hospital: the role of psychosocial problems. *Soc Work Health Care.* 2001;33(2):1-16. PMID: 11760111

201. Hwang SW, Weaver J, Aubry T, Hoch JS. Hospital costs and length of stay among homeless patients admitted to medical, surgical, and psychiatric services. *Med Care*. 2011;49(4):350-4. PMID: 21368678
202. Feigal J, Park B, Bramante C, Nordgaard C, Menk J, Song J. Homelessness and discharge delays from an urban safety net hospital. *Public Health*. 2014;128(11):1033. PMID: 25443103
203. Velez CM, Nicolaidis C, Korthuis PT, Englander H. "It's been an experience, a life learning experience": a qualitative study of hospitalized patients with substance use disorders. *J Gen Intern Med*. 2017;32(3):296-303. PMID: 27957661
204. Jenkinson J, Wheeler A, Wong C, Pires LM. Hospital discharge planning for people experiencing homelessness leaving acute care: a neglected issue. *Health Policy*. 2020;16(1):14-21. PMID: 32813636
205. Watson SD. Discharges to the streets: hospitals and homelessness. *Saint Louis University Public Law Rev*. 2000;19:357. Available from: <https://scholarship.law.slu.edu/cgi/viewcontent.cgi?article=1421&context=plr>
206. Buccieri K, Oudshoorn A, Frederick T, Schiff R, Abramovich A, Gaetz S, Forchuk C. Hospital discharge planning for Canadians experiencing homelessness. HCS. 2018.
207. Brandão C, Rego G, Duarte I, Nunes R. Social responsibility: a new paradigm of hospital governance? *Health Care Anal*. 2013;21(4):390-402. PMID: 22481565
208. Gordon JA. Social welfare in the hospital emergency department: the challenge of integrated community health care. *Ann Emerg Med*. 2009;53(5):603-4. PMID: 19181421
209. Gordon JA. The science of common sense: integrating health and human services in the hospital emergency department. *Ann Emerg Med*. 2005;45(3):251-2. PMID: 15726046
210. Gordon JA. Cost-benefit analysis of social work services in the emergency department: a conceptual model. *Acad Emerg Med*. 2001;8(1):54-60. PMID: 11136149
211. Bywaters P, McLeod E. Social care's impact on emergency medicine: a model to test. *Emerg Med J*. 2003;20(2):134-7. PMID: 12642525
212. Auerbach C, Mason SE. The value of the presence of social work in emergency departments. *Soc Work Health Care*. 2010;49(4):314-26. PMID: 20379902
213. Bywaters P, McLeod E, Fisher J, Cooke M, Swann G. Good intentions, increased inequities: developing social care services in emergency departments in the UK. *Health Soc Care Community*. 2011;19(5):460-7. PMID: 21790826

214. Craig SL, Bejan R, Muskat B. Making the invisible visible: are health social workers addressing the social determinants of health? *Soc Work Health Care*. 2013;52(4):311-31. PMID: 23581836
215. Judd RG, Sheffield S. Hospital social work: contemporary roles and professional activities. *Soc Work Health Care*. 2010;49(9):856-71. PMID: 20938879
216. Bryson SA, Bosma H. Health social work in Canada: five trends worth noting. *Soc Work Health Care*. 2018;57(8):1-26. PMID: 29847225
217. Gregorian C. A career in hospital social work: do you have what it takes? *Soc Work Health Care*. 2005;40(3):1-14. PMID: 15837665
218. Craig SL, Muskat B. Bouncers, brokers, and glue: the self-described roles of social workers in urban hospitals. *Health Soc Work*. 2013;38(1):7-16. PMID: 23539892
219. Muskat B, Craig SL, Mathai B. Complex families, the social determinants of health and psychosocial interventions: deconstruction of a day in the life of hospital social workers. *Soc Work Health Care*. 2017;56(8):765-78. PMID: 28696836
220. Moore M, Whiteside LK, Dotolo D, Wang J, Ho L, Conley B, Forrester M, Fouts SO, Vavilala MS, Zatzick DF. The role of social work in providing mental health services and care coordination in an urban trauma center emergency department. *Psychiatr Serv*. 2016;67(12):1348-54. PMID: 27417898
221. Weiss ME, Bobay KL, Bahr SJ, Costa L, Hughes RG, Holland DE. A model for hospital discharge preparation: from case management to care transition. *J Nurs Adm*. 2015;45(12):606-14. PMID: 26502068
222. Chapman SA, Blash LK, Mayer K, Spetz J. Emerging roles for peer providers in mental health and substance use disorders. *Am J Prev Med*. 2018;54(6):S267-S274. PMID: 29779551
223. Bassuk EL, Hanson J, Greene RN, Richard M, Laudet A. Peer-delivered recovery support services for addictions in the United States: a systematic review. *J Subst Abuse Treat*. 2016;63:1-9. PMID: 26882891
224. Myrick K, del Vecchio P. Peer support services in the behavioral healthcare workforce: State of the field. *Psychiatr Rehabil J*. 2016;39(3):197. PMID: 27183186
225. Wrenn K, Rice N. Social-work services in an emergency department: an integral part of the health care safety net. *Acad Emerg Med*. 1994;1(3):247-53. PMID: 7621204
226. Moore M, Ekman E, Shumway M. Understanding the critical role of social work in safety net medical settings: framework for research and practice in the emergency department. *Soc Work Health Care*. 2012;51(2):140-8. PMID: 22352362

227. Bejan R, Craig S, Saini M. "I love my job, but..." a portrait of Canadian social workers' occupational conditions. *Can Soc Work J.* 2014;16(1):23-45.
228. McLaughlin J. Social work in acute hospital settings in Northern Ireland: The views of service users, carers and multi-disciplinary professionals. *J Soc Work.* 2016;16(2):135-54. DOI: 10.1177/1468017314568843
229. Blondell RD, Behrens T, Smith SJ, Greene BJ, Servoss TJ. Peer support during inpatient detoxification and aftercare outcomes. *Addict Disord their Treat.* 2008;7(2):77-86. DOI: 10/1097/ADT.0.b013e31804eff1b
230. Popova S, Rehm J, Fischer B. An overview of illegal opioid use and health services utilization in Canada. *Public Health.* 2006;120(4):320-8. PMID: 16476455
231. Murphy DA, Shetty V, Resell J, Zigler C, Yamashita DD. Substance use in vulnerable patients with orofacial injury: prevalence, correlates, and unmet service needs. *J Trauma.* 2009;66(2):477-84. PMID: 19204524
232. Rosenthal ES, Karchmer AW, Theisen-Toupal J, Castillo RA, Rowley CF. Suboptimal addiction interventions for patients hospitalized with injection drug use-associated infective endocarditis. *Am J Med.* 2016;129(5):481-5. PMID: 26597670
233. Fader HC, Phillips CN. Frequent-user patients: reducing costs while making appropriate discharges: hospitals need effective policies for discharging homeless patients, who, without such policies, would likely soon return to the ED only to be readmitted as inpatients. *Healthc Financ Manage.* 2012;66(3):98-104.
234. Fitzpatrick-Lewis D, Ganann R, Krishnaratne S, Ciliska D, Kouyoumdjian F, Hwang SW. Effectiveness of interventions to improve the health and housing status of homeless people: a rapid systematic review. *BMC Public Health.* 2011;11(1):638. PMID: 21831318
235. Dove HG, Schneider KC, Gitelson DA. Identifying patients who need social work services: an interdisciplinary analysis. *Soc Work.* 1985;30(3):214-8. PMID: 10271674
236. Albrithen A, Yalli N. Meddical social workers' perceptions related to interprofessional teamwork at hospitals. *J Soc Serv Res.* 2015;41(5):722-31. DOI: 10.1080/01488376.1068723
237. Mizrahi T, Abramson JS. Collaboration between social workers and physicians. *Soc Work Health Care.* 2000;31(3):1-24. DOI: 10.1300/J010v31n03_01
238. Sweifach JS. Social workers and interprofessional practice: perceptions from within. *J Interprof Educ Pract.* 2015;1(1):21-7. DOI: 10.1016/j.xjep.2015.03.004

239. Zerger S, Doblin B, Thompson L. Medical respite care for homeless people: a growing national phenomenon. *J Health Care Poor Underserved*. 2009;20(1):36-41. PMID: 19202243
240. Tsai M, Weintraub R, Gee L, Kushel M. Identifying homelessness at an urban public hospital: a moving target? *J Health Care Poor Underserved*. 2005;16(2):297-307. PMID: 15937393
241. Greysen SR, Allen R, Rosenthal MS, Lucas GI, Wang EA. Improving the quality of discharge care for the homeless: a patient-centered approach. *J Health Care Poor Underserved*. 2013;24(2):444-55. PMID: 23728021
242. Henderson S, Stacey CL, Dohan D. Social stigma and the dilemmas of providing care to substance users in a safety-net emergency department. *J Health Care Poor Underserved*. 2008;19(4):1336-49. PMID: 19029756
243. Englander H, Weimer M, Solotaroff R, Nicolaidis C, Chan B, Velez C, Noice A, Hartnett T, Blackburn E, Barnes P, et al. Planning and designing the Improving Addiction Care Team (IMPACT) for hospitalized adults with substance use disorder. *J Hosp Med*. 2017;12(5):339-42. PMID: 28459904
244. Frankish CJ, Hwang SW, Quantz D: The relationship between homelessness and health: An overview of research in Canada. *Finding home: Policy Options for Addressing Homelessness in Canada*. 2009:1-21. Available from: <https://homelesshub.ca/sites/default/files/attachments/2.1%20Frankish%20et%20al%20-%20Homelessness%20and%20Health.pdf>
245. Grinman MN, Chiu S, Redelmeier DA, Levinson W, Kiss A, Tolomiczenko G, Cowan L, Hwang SW. Drug problems among homeless individuals in Toronto, Canada: prevalence, drugs of choice, and relation to health status. *BMC Public Health*. 2010;10(1):1-7. PMID: 20181248
246. International Harm Reduction. What is harm reduction? 2020. Available from <https://www.hri.global/what-is-harm-reduction>
247. Pates R, Riley D. *Harm reduction in substance use and high-risk behaviour*: John Wiley & Sons; 2012.
248. Tulchinsky TH, Varavikova EA. What is the “new public health”? *Public Health Rev*. 2010;32(1):25. DOI:
249. World Health Organization. Harm reduction. 2020. Available from <http://www.euro.who.int/en/health-topics/communicable-diseases/hiv-aids/policy/policy-guidance-for-areas-of-intervention/harm-reduction>

250. Transnational Institute. The United Nations and Harm Reduction. Drug Policy Briefing. vol. No 12; 2005. Available from <https://www.tni.org/files/download/brief12.pdf>
251. Government of Canada. Pillars of the Canadian drugs and substances strategy. 2016. Available from <https://www.canada.ca/en/health-canada/services/publications/healthy-living/pillars-canadian-drugs-substances-strategy.html>
252. Hunt N, Ashton M, Lenton S, Mitcheson L, Nelles B, Stimson G. Review of the evidence-base for harm reduction approaches to drug use. *Forward Thinking on Drugs*; 2003.
253. Hilton BA, Thompson R, Moore-Dempsey L, Janzen RG. Harm reduction theories and strategies for control of human immunodeficiency virus: a review of the literature. *J Adv Nurs*. 2001;33(3):357-70. PMID: 11251723
254. Kennedy MC, Karamouzian M, Kerr T. Public health and public order outcomes associated with supervised drug consumption facilities: a systematic review. *Curr HIV/AIDS Rep*. 2017;14(5):161-83. PMID: 28875422
255. Potier C, Lapr evote V, Dubois-Arber F, Cottencin O, Rolland B. Supervised injection services: what has been demonstrated? A systematic literature review. *Drug Alcohol Depend*. 2014;145:48-68. PMID: 25456324
256. Davis SM, Daily S, Kristjansson AL, Kelley GA, Zullig K, Baus A, Davidov D, Fisher M. Needle exchange programs for the prevention of hepatitis C virus infection in people who inject drugs: a systematic review with meta-analysis. *Harm Reduct J*. 2017;14(1):25. PMID: 28514954
257. Jozaghi E, Reid AA, Andresen MA, Juneau A. A cost-benefit/cost-effectiveness analysis of proposed supervised injection facilities in Ottawa, Canada. *Subst Abuse Treat Prev Policy*. 2014;9(1):31. PMID: 25091704
258. Wilson DP, Donald B, Shattock AJ, Wilson D, Fraser-Hurt N. The cost-effectiveness of harm reduction. *Int J Drug Policy*. 2015;26:S5-S11. PMID: 25727260
259. Pauly B. Harm reduction through a social justice lens. *Int J Drug Policy*. 2008;19(1):4-10. PMID: 18226520
260. Pauly B, Reist D, Belle-Isle L, Schactman C. Housing and harm reduction: what is the role of harm reduction in addressing homelessness? *Int J Drug Policy*. 2013;24(4):284-90. PMID: 23623720
261. Hawk M, Coulter RWS, Egan JE, Fisk S, Reuel Friedman M, Tula M, Kinsky S. Harm reduction principles for healthcare settings. *Harm Reduct J*. 2017;14(1):70. PMID: 29065896

262. Smith CB. Harm reduction as anarchist practice: A user's guide to capitalism and addiction in North America. *Crit Public Health*. 2012;22(2):209-21. DOI: 10.1080/09581596.2011.611487
263. Fischer B. The battle for a new Canadian drug law: a legal basis for harm reduction or a new rhetoric for prohibition? *A Chronology*. *Harm reduction: A new Direction for Drug Policies and Programs*. 1997:47-68.
264. Roe G. Harm reduction as paradigm: is better than bad good enough? The origins of harm reduction. *Crit Public Health*. 2005;15(3):243-50. DOI: 10.1080/09581590500372188
265. Gowan T, Whetstone S, Andic T. Addiction, agency, and the politics of self-control: Doing harm reduction in a heroin users' group. *Soc Sci Med*. 2012;74(8):1251-60. PMID: 22385814
266. Boucher LM, Marshall Z, Martin A, Larose-Hébert K, Flynn JV, Lalonde C, Pineau D, Bigelow J, Rose T, Chase R. Expanding conceptualizations of harm reduction: results from a qualitative community-based participatory research study with people who inject drugs. *Harm Reduct J*. 2017;14(1):18. PMID: 28494774
267. Campbell ND, Shaw SJ. Incitements to discourse: Illicit drugs, harm reduction, and the production of ethnographic subjects. *Cult Anthropol*. 2008;23(4):688-717. DOI: 10.1111/j.1548-1360.2008.00023.x
268. Jozaghi E, Greer AM, Lampkin H, Buxton JA. Activism and scientific research: 20 years of community action by the Vancouver area network of drug users. *Subst Abuse Treat Prev Policy*. 2018;13(1):1-9. PMID: 29788975
269. Jozaghi E. The role of drug users' advocacy group in changing the dynamics of life in the Downtown Eastside of Vancouver, Canada. *J Subst Use*. 2014;19(1-2):213-8. DOI: 10.3109/14659891.2013.775608
270. Kerr T, Small W, Pease W, Douglas D, Pierre A, Wood E. Harm reduction by a "user-run" organization: a case study of the Vancouver Area Network of Drug Users (VANDU). *Int J Drug Policy*. 2006;17(2):61-69. DOI: 10.1016/j.drugpo.2006.01.003
271. Fischer B, Turnbull S, Poland B, Haydon E. Drug use, risk and urban order: examining supervised injection sites (SISs) as 'governmentality'. *Int J Drug Policy*. 2004;15(5-6):357-65. DOI: 10.1016/j.drugpo.2004.04.002
272. Duncan DF, Nicholson T, Clifford P, Hawkins W, Petosa R. Harm reduction: An emerging new paradigm for drug education. *J Drug Educ*. 1994;24(4):281-90. PMID: 7869220
273. Saunders B. *Illicit drugs and harm reduction education*. Taylor & Francis; 1995.

274. Hathaway AD. Shortcomings of harm reduction: Toward a morally invested drug reform strategy. *Int J Drug Policy*. 2001;12(2):125-37. PMID: 11399416
275. Bradley-Springer L. Patient education for behavior change: Help from the transtheoretical and harm reduction models. *J Assoc Nurses AIDS Care*. 1996;7:23-33. PMID: 9021641
276. Hunt N. Public health or human rights: what comes first? *Int J Drug Policy*. 2004;15(4):231-7. DOI: 10.1016/j.drugpo.2004.02.001
277. Keane H. Critiques of harm reduction, morality and the promise of human rights. *Int J Drug Policy*. 2003;14(3):227-32. PMID: 22818891
278. Albert ER. Harm reduction: contribution to a critical appraisal from the perspective of people who use drugs. *Harm Reduction in Substance Use and High-Risk Behaviour: International Policy and Practice*. 2012;124-132.
279. Ezard N. Public health, human rights and the harm reduction paradigm: from risk reduction to vulnerability reduction. *Int J Drug Policy*. 2001;12(3):207-219. DOI: 10.1016/S0955-3959(01)00093-7
280. O'Malley P. Consuming risks: Harm minimization and the government of drug users. *Governable Places: Readings on Governmentality and Crime Control*. 1999;191-214.
281. Fischer B, Turnbull S, Poland B, Haydon E. Drug use, risk and urban order: examining supervised injection sites (SISs) as 'governmentality'. *Int J Drug Policy*. 2004;15(5):357-65. DOI: 10.1016/j.drugpo.2004.04.002
282. Eversman MH. "Trying to find the middle ground": drug policy and harm reduction in Black communities. *Jace Justice*. 2013;4(1):29-44. DOI: 10.1177/2153368713517395
283. Lloyd C. The stigmatization of problem drug users: a narrative literature review. *Drugs Educ Prev Policy*. 2013;20(2):85-95. DOI: 10.3109/09687637.2012.743506
284. Hawk KF, Vaca FE, D'Onofrio G. Reducing fatal opioid overdose: prevention, treatment and harm reduction strategies. *Yale J Biol Med*. 2015;88(3):235-45. PMID: 26339206
285. Riley D, O'Hare P. Harm reduction: history, definition, and practice. *Harm Reduction: National and International Perspectives*. 2000;1000:1-26.
286. Tammi T, Hurme T. How the harm reduction movement contrasts itself against punitive prohibition. *Int J Drug Policy*. 2007;18(2):84-7. PMID: 17689349
287. MacArthur GJ, van Velzen E, Palmateer N, Kimber J, Pharris A, Hope V, Taylor A, Roy K, Aspinall E, Goldberg D. Interventions to prevent HIV and hepatitis C in people who

- inject drugs: a review of reviews to assess evidence of effectiveness. *Int J Drug Policy*. 2014;25(1):34-52. PMID: 23973009
288. Harm Reduction International: The Global State of Harm Reduction 2020. Available from: <https://www.hri.global/global-state-of-harm-reduction-2020>
289. Hyshka E, Anderson-Baron J, Karekezi K, Belle-Isle L, Elliott R, Pauly B, Strike C, Asbridge M, Dell C, McBride K. Harm reduction in name, but not substance: a comparative analysis of current Canadian provincial and territorial policy frameworks. *Harm Reduct J*. 2017;14(1):50. PMID: 28747183
290. Ball AL. HIV, injecting drug use and harm reduction: a public health response. *Addiction*. 2007;102(5):684-90. PMID: 17506148
291. Room R. Symbolism and rationality in the politics of psychoactive substances. *Adv Health Econ Health Serv Res*. 2005;16:331-46. PMID: 17867247
292. Ritter A. How do drug policy makers access research evidence? *Int J Drug Policy*. 2009;20(1):70-5. PMID: 18226519
293. Wild TC, Pauly B, Belle-Isle L, Cavalieri W, Elliott R, Strike C, Tupper K, Hathaway A, Dell C, MacPherson D. Canadian harm reduction policies: a comparative content analysis of provincial and territorial documents, 2000–2015. *Int J Drug Policy*. 2017;45:9-17. PMID: 28454045
294. Hyshka E, Anderson-Baron J, Pugh A, Belle-Isle L, Hathaway A, Pauly B, Strike C, Asbridge M, Dell C, McBride K. Principles, practice, and policy vacuums: policy actor views on provincial/territorial harm reduction policy in Canada. *Int J Drug Policy*. 2019;71:142-9. PMID: 30711412
295. Hyshka E, Strathdee S, Wood E, Kerr T. Needle exchange and the HIV epidemic in Vancouver: lessons learned from 15 years of research. *Int J Drug Policy*. 2012;23(4):261-70. PMID: 22579215
296. Boyd N. Lessons from INSITE, Vancouver's supervised injection facility: 2003–2012. *Drugs Educ Prev Policy*. 2013;20(3):234-40. DOI: 10.3109/09687637.2012.755495
297. Baker T, McCann E, Temenos C. Into the ordinary: non-elite actors and the mobility of harm reduction policies. *Policy Soc*. 2020;39(1):129-145. DOI: 10.1080/14494035.2019.1626079
298. Fletcher AJ. Applying critical realism in qualitative research: methodology meets method. *Int J Soc Res Methodol*. 2017;20(2):181-94. DOI: 10.1080/13645579.2016.1144401

299. Yucel R. Scientists' ontological and epistemological views about science from the perspective of critical realism. *Sci Educ.* 2018;27(5):407-33. DOI: 10.1007/s11191-018-9983-x
300. Corbin J, Strauss A, Strauss AL. *Basics of qualitative research*: Sage; 2014
301. Maxwell JA. *A realist approach for qualitative research*: Sage; 2012.
302. Patomäki H. Realist ontology for futures studies. *J Crit Realism.* 2006;5(1):1-31. DOI: 10.1558/jocr.v5i1.1
303. Lewer D, Freer J, King E, Larney S, Degenhardt L, Tweed EJ, Hope VD, Harris M, Millar T, Hayward A. Frequency of healthcare utilisation by adults who use illicit drugs: a systematic review and meta-analysis. *Addiction.* 2019;115(6):1011-23. PMID: 31705770
304. Salhi BA, White MH, Pitts SR, Wright DW. Homelessness and emergency medicine: a review of the literature. *Acad Emerg Med.* 2018;25(5):577-93. PMID: 29223132
305. Khandor E, & Mason, K. *The Street Health Report 2007*. Street Health. Available from: <https://www.streethealth.ca/downloads/the-street-health-report-2007.pdf>
306. Stafford A, Wood L. Tackling health disparities for people who are homeless? Start with social determinants. *Int J Environ Res Public Health.* 2017;14(12):1535. PMID: 29292758
307. Daniel H, Bornstein SS, Kane GC. Addressing social determinants to improve patient care and promote health equity: an American College of Physicians position paper. *Ann Intern Med.* 2018;168(8):577-8. PMID: 29677265
308. Heenan D, Birrell D. Hospital-Based Social Work: Challenges at the Interface between Health and Social Care. *Br J Soc Work.* 2018;49:1741-58. DOI: 10.1093/bjsw/bcy114
309. Glaser B, Suter E. Interprofessional collaboration and integration as experienced by social workers in health care. *Soc Work Health Care.* 2016;55(5):395-408. PMID: 27007283
310. Galvani S, Hutchinson A, Dance C. Identifying and assessing substance use: findings from a national survey of social work and social care professionals. *Br J Soc Work.* 2014;44(7):1895-1913. DOI: 10.1093/bjsw/bct-033
311. Cronley C, Murphy ER, Petrovich JC. Homelessness from a holistic paradigm: Bridging gaps in curriculum through supplemental education opportunities. *J Soc Work Educ.* 2020;56(sup1):S16-S27. DOI: 10.1080/10437797.2020.1723762

312. Grewal HK, Ti L, Hayashi K, Dobrer S, Wood E, Kerr T. Illicit drug use in acute care settings. *Drug Alcohol Rev.* 2015;34(5):499-502. PMID: 25944526
313. Forchuk C, Reiss J, Mitchell B, Ewen S, Meier A. Homelessness and housing crises among individuals accessing services within a Canadian emergency department. *JJ Psychiatr Ment Health Nurs.* 2015;22(6):354-9. PMID: 25990385
314. Mcallister A. Mental illnesses are not an ‘ideal type’ of disability for disability income support: perceptions of policymakers in Australia and Canada. *Scand J Public Health.* 2020;48(4):452-9. PMID: 30632917
315. McAllister A, Hackett ML, Leeder SR. Disability income support design and mental illnesses: a review of Australia and Ontario. *Public Health Res Pract.* 2017;27(2):2721715. PMID: 28474052
316. Erickson PG, Callaghan RC. The probable impacts of the removal of the addiction disability benefit in Ontario. *Can J Commun Ment Health.* 2005;24:99-108. PMID: 16774138
317. Formosa EA, Kishimoto V, Orchanian-Cheff A, Hayman K. Emergency department interventions for homelessness: a systematic review. *CJEM.* 2021;23(1):111-22. PMID: 33683611
318. Hwang SW, Tolomiczenko G, Kouyoumdjian FG, Garner RE. Interventions to improve the health of the homeless: a systematic review. *Am J Prev Med.* 2005;29(4):311-9. PMID: 16242595
319. Venzon Cruz E, Higginbottom G. The use of focused ethnography in nursing research. *Nurse Res.* 2013;20(4):36-43. PMID: 23520711
320. Higginbottom G, Pillay JJ, Boadu NY. Guidance on performing focused ethnographies with an emphasis on healthcare research. *Qual Report.* 2013;18(9):1-6. DOI:
321. Mayan MJ: *Essentials of qualitative inquiry*: Routledge; 2016.
322. Government of Alberta. Community profile: Edmonton - Eastwood: health data and summary. 2017. Available from: <https://open.alberta.ca/dataset/769619ed-ea88-4838-9e84-88ddb53ca659/resource/58184201-e8b6-4c7f-81d4-d34149ccbd3c/download/phc-profile-edmonton-eastwood-2017.pdf>
323. Government of Alberta: Alberta Opioids Response Surveillance Report: 2018 Q2. In.: Government of Alberta; 2018: 32. Available from: <https://open.alberta.ca/dataset/f4b74c38-88cb-41ed-aa6f-32db93c7c391/resource/e8c44bab-900a-4af4-905a-8b3ef84ebe5f/download/health-alberta-covid-19-opioid-response-surveillance-report-2020-q2.pdf>

324. Alberta Health: Alberta Opioid Response Surveillance Report: 2018 Q4 In.: Government of Alberta; 2019. Available from: <https://open.alberta.ca/dataset/f4b74c38-88cb-41ed-aa6f-32db93c7c391/resource/0654bbdd-f26e-4add-9ffd-b7146fd25554/download/opioid-response-surveillance-report-2018-q4.pdf>
325. Sandelowski M. Sample size in qualitative research. *Res Nurs Health*. 1995;18(2):179-183. PMID: 7899572
326. McLeroy KR, Bibeau D, Steckler A, Glanz K. An ecological perspective on health promotion programs. *Health Educ Q*. 1988;15(4):351-77. PMID: 3068205
327. Stokols D. Translating social ecological theory into guidelines for community health promotion. *Am J Health Promot*. 1996;10(4):282-98. PMID: 10159709
328. Sallis JF, Owen N, Fisher E. Ecological models of health behavior. *Health Behav Theor Res Pract*. 2015;5(43-64).
329. Morse JM. Critical analysis of strategies for determining rigor in qualitative inquiry. *Qual Health Res*. 2015;25(9):1212-22. PMID: 26184336
330. Lee BC, Bendixsen C, Liebman AK, Gallagher SS. Using the socio-ecological model to frame agricultural safety and health interventions. *J Agromedicine*. 2017;22(4):298-303. PMID: 28762886
331. Atherton I, Nicholls CM. 'Housing First' as a means of addressing multiple needs and homelessness. *Euro J Homeless*. 2008; 2:289-303.
332. Olsson M, Hansagi H. Repeated use of the emergency department: qualitative study of the patient's perspective. *Emerg Med J*. 2001;18(6):430-4. PMID: 11696488
333. Allman D, Myers T, Schellenberg J, Strike C, Cockerill R, Cavalieri W. Improving health and social care relationships for harm reduction. *Int J Drug Policy*. 2007;18(3):194-203. PMID: 17689366
334. Lloyd C, King R, Chenoweth L. Social work, stress and burnout: a review. *J Ment Health*. 2002;11(3):255-65. DOI: 10.1080/09638230020023642
335. Gupta S, Xie E, Dong K. Treating homelessness as an emergency: learning from the COVID-19 response. *CJEM*. 2021;23(1):8-9. PMID: 33683622
336. IR Jenkinson J, Strike C, Hwang SW, Di Ruggiero E. Legal, geographic and organizational contexts that shape knowledge sharing in the hospital discharge process for people experiencing homelessness in Toronto, Canada. *Health Soc Care Community*. 2020. PMID: 33105525

337. Dickey B, Normand S-LT, Weiss RD, Drake RE, Azeni H. Medical morbidity, mental illness, and substance use disorders. *Psychiatr Serv.* 2002;53(7):861-7. PMID: 12096170
338. Sadowski LS, Kee RA, VanderWeele TJ, Buchanan D. Effect of a housing and case management program on emergency department visits and hospitalizations among chronically ill homeless adults: a randomized trial. *JAMA.* 2009;301(17):1771-8. PMID: 19417194
339. Srebnik D, Connor T, Sylla L. A pilot study of the impact of housing first—supported housing for intensive users of medical hospitalization and sobering services. *Am J Public Health.* 2013;103(2):316-21. PMID: 23237150
340. Lopez AM, Comfort M, Powers C, Kral AH, Lorvick J. Structural vulnerability and supplemental security income: Subtle modes of punitive governance within federal social welfare. *Hum Organ.* 2018;77(4):302-11. DOI: 0018-7259/18/040302-10\$1.50/1
341. Gutman SA, Raphael-Greenfield EI. Effectiveness of a supportive housing program for homeless adults with mental illness and substance use: a two-group controlled trial. *Br J Occup Ther.* 2017;80(5):286-93. DOI: 10.1177/0308022616680368
342. Pottie K, Kendall CE, Aubry T, Magwood O, Andermann A, Salvalaggio G, Ponka D, Bloch G, Brcic V, Agbata E. Clinical guideline for homeless and vulnerably housed people, and people with lived homelessness experience. *CMAJ.* 2020;192(10):E240-E254. PMID: 32152052
343. Aubry T, Bloch G, Brcic V, Saad A, Magwood O, Abdalla T, Alkhateeb Q, Xie E, Mathew C, Hannigan T. Effectiveness of permanent supportive housing and income assistance interventions for homeless individuals in high-income countries: a systematic review. *Lancet Public Health.* 2020;5(6):e342-e360. PMID: 32504587
344. Patton MQ. Qualitative research. *Encyclopedia of Statistics in Behavioral Science*; 2005.
345. Hewitt J. Ethical components of researcher—researched relationships in qualitative interviewing. *Qual Health Res.* 2007;17(8):1149-59. PMID: 17928485
346. Rhodes T, Lilly R, Fernández C, Giorgino E, Kemmesis UE, Ossebaard HC, Lalam N, Faasen I, Spannow KE. Risk factors associated with drug use: the importance of ‘risk environment’. *Drugs Educ Prev Policy.* 2003;10(4):303-29. DOI: 10.1080/0968763031000077733
347. Strathdee SA, Beletsky L, Kerr T. HIV, drugs and the legal environment. *Int J Drug Policy.* 2015;26:S27-S32. PMID: 25265900
348. Ritter A, Ritter A, Cameron J, Ritter A, Cameron J. A review of the efficacy and effectiveness of harm reduction strategies for alcohol, tobacco and illicit drugs. *Drug Alcohol Rev.* 2006;25(6):611-24. PMID: 17132577

349. Irvine MA, Kuo M, Buxton JA, Balshaw R, Otterstatter M, Macdougall L, Milloy MJ, Bharmal A, Henry B, Tyndall M. Modelling the combined impact of interventions in averting deaths during a synthetic-opioid overdose epidemic. *Addiction*. 2019;114(9):1602-13. PMID: 31166621
350. Marshall BD, Milloy MJ, Wood E, Montaner JS, Kerr T. Reduction in overdose mortality after the opening of North America's first medically supervised safer injecting facility: a retrospective population-based study. *Lancet*. 2011;377(9775):1429-37. PMID: 21497898
351. Marshall T, Abba-Aji A, Tanguay R, Greenshaw AJ. The impact of supervised consumption services on fentanyl-related deaths: lessons learned from Alberta's provincial Data. *Can J Psychiatry*. 2021;0706743721999571. PMID: 33739168
352. Kerr T. Public health responses to the opioid crisis in North America. *J Epidemiol Community Health*. 2019;73(5):377-78. PMID: 30723087
353. Etikan I, Musa SA, Alkassim RS. Comparison of convenience sampling and purposive sampling. *AJTAS*. 2016;5(1):1-4. DOI: 10.11648/j.ajtas.20160501.11
354. Johnson TP. Snowball sampling: introduction. *Wiley StatsRef: Statistics Reference Online* 2014.
355. Neuman W, Robson K. Basics of social research: qualitative and quantitative approaches. *Methods*. 2020;12(3):554-566.
356. Waddell C, Lavis JN, Abelson J, Lomas J, Shepherd CA, Bird-Gayson T, Giacomini M, Offord DRD. Research use in children's mental health policy in Canada: maintaining vigilance amid ambiguity. *Soc Sci Med*. 2005;61(8):1649-57. PMID: 16029772
357. Haines-Saah RJ, Moffat B, Jenkins EK, Johnson JL. The influences of health beliefs and identity on adolescent marijuana and tobacco co-use. *Qual Health Res*. 2014;24(7):946-56. PMID: 24970249
358. Government of Canada: Social determinants of health and health inequalities: 2020. Available from: <https://www.canada.ca/en/public-health/services/health-promotion/population-health/what-determines-health.html>
359. Raphael D. A discourse analysis of the social determinants of health. *Crit Public Health*. 2011;21(2):221-36. DOI: 10.1080/09581596.2010.485606
360. Ranney ML, Meisel ZF, Choo EK, Garro AC, Sasson C, Morrow Guthrie K. Interview-based qualitative research in emergency care part II: Data collection, analysis and results reporting. *Acad Emerg Med*. 2015;22(9):1103-12. PMID: 26284572

361. Ivsins A, Boyd J, Beletsky L, McNeil R. Tackling the overdose crisis: the role of safe supply. *Int J Drug Policy*. 2020;80:102769. PMID: 32446183
362. Collins AB, Boyd J, Cooper HL, McNeil R. The intersectional risk environment of people who use drugs. *Soc Scie Med*. 2019;112384. PMID: 31254965
363. Hankivsky O, Reid C, Cormier R, Varcoe C, Clark N, Benoit C, Brotman S. Exploring the promises of intersectionality for advancing women's health research. *Int J Equity Health*. 2010;9(1):1-15. PMID: 20181225
364. Hankivsky O. *Health inequities in Canada: Intersectional frameworks and practices*: UBC Press; 2011.
365. Chaplin D, Twigg J, Lovell E. Intersectional approaches to vulnerability reduction and resilience-building. *Resilience Intel*. 2019;12.
366. Fisher M, Baum FE, MacDougall C, Newman L, McDermott D, Phillips C. Intersectoral action on SDH and equity in Australian health policy. *Health Promot Int*. 2017;32(6):953-63. PMID: 27162245
367. Chircop A, Bassett R, Taylor E. Evidence on how to practice intersectoral collaboration for health equity: a scoping review. *Crit Public Health*. 2015;25(2):178-191. DOI: 10.1080/09581596.2014.887831
368. Turner A, Krecsy D. Bringing it all together: integrating services to address homelessness. The School of Public Policy Publications. 2019;12. Available from: <https://www.homelesshub.ca/sites/default/files/attachments/Homelessness-Turner-Krecsy-final.pdf>
369. Loewenson R, World Health Organization. Evaluating intersectoral processes for action on the social determinants of health: learning from key informants. 2013. Available form: https://apps.who.int/iris/bitstream/handle/10665/84373/9789241505369_eng.pdf
370. Christensen T, Lægreid P. The whole-of-government approach to public sector reform. *Public Adm Rev*. 2007;67(6):1059-66. DOI:
371. Blankenship KM, Friedman SR, Dworkin S, Mantell JE. Structural interventions: concepts, challenges and opportunities for research. *J Urban Health*. 2006;83(1):59-72. PMID: 16736355
372. Dollar CB. Criminalization and drug “wars” or medicalization and health “epidemics”: How race, class, and neoliberal politics influence drug laws. *Crit Criminol*. 2019;27(2):305-27. DOI: 10.1007/s10612-018-9398-7

373. Arat-Koç S. Invisibilized, individualized, and culturalized: Paradoxical invisibility and hyper-visibility of gender in policy making and policy discourse in neoliberal Canada. *Can Womens Stud* 2012, 29(3). DOI:
374. Boyd S. Gendered drug policy: Motherisk and the regulation of mothering in Canada. *Int J Drug Policy*. 2019;68:109-116. PMID: 30583923
375. Virani HN, Haines-Saah RJ. Drug decriminalization: a matter of justice and equity, not just health. *Am J Prev Med*. 2020;58(1):161-4. PMID: 31735479
376. Bonn M, Palayew A, Bartlett S, Brothers TD, Touesnard N, Tyndall M. Addressing the syndemic of HIV, hepatitis C, overdose, and COVID-19 among people who use drugs: The potential roles for decriminalization and safe supply. *J Stud Alcohol Drugs*. 2020;81(5):556-60. PMID: 33028465
377. Jürgens R: "Nothing about us without us"-greater, meaningful involvement of people who use illegal drugs: a public health, ethical, and human rights imperative. *Canadian HIV/AIDS Legal Network*; 2005. Available from: <http://www.hivlegalnetwork.ca/site/wp-content/uploads/2013/04/Greater+Involvement+-+Bklt+-+Drug+Policy+-+ENG.pdf>
378. Greenhalgh T, Jackson C, Shaw S, Janamian T. Achieving research impact through co-creation in community-based health services: literature review and case study. *Milbank Q*. 2016;94(2):392-429. PMID: 27265562
379. Ti L, Tzemis D, Buxton JA. Engaging people who use drugs in policy and program development: a review of the literature. *Subst Abuse Treat Prev Policy*. 2012;7(1):1-9. PMID: 23176382
380. Collins AB, Strike C, Guta A, Turje RB, McDougall P, Parashar S, McNeil R. "We're giving you something so we get something in return": perspectives on research participation and compensation among people living with HIV who use drugs. *Int J Drug Policy*. 2017;39:92-98. PMID: 27780116
381. Damon W, Callon C, Wiebe L, Small W, Kerr T, McNeil R. Community-based participatory research in a heavily researched inner city neighbourhood: perspectives of people who use drugs on their experiences as peer researchers. *Soc Sci Med*. 2017;176:85-92. PMID: 28135693
382. Greer AM, Amlani A, Burmeister C, Scott A, Newman C, Lampkin H, Pauly B, Buxton JA. Peer engagement barriers and enablers: insights from people who use drugs in British Columbia, Canada. *Can J Public Health*. 2019;110(2):227-35. PMID: 30610564
383. Souleymanov R, Allman D. Articulating connections between the harm-reduction paradigm and the marginalisation of people who use illicit drugs. *Br J Soc Work*. 2015;46(5):1429-45. PMID: 27559236

384. Brown G, Crawford S, Perry G-E, Byrne J, Dunne J, Reeders D, Corry A, Dicka J, Morgan H, Jones S. Achieving meaningful participation of people who use drugs and their peer organizations in a strategic research partnership. *Harm Reduct J.* 2019;16(1):1-10. PMID: 31182099
385. Greer AM, Amlani A, Pauly B, Burmeister C, Buxton JA. Participant, peer and PEEP: considerations and strategies for involving people who have used illicit substances as assistants and advisors in research. *BMC Public Health.* 2018;18(1):1-11. PMID: 29976169
386. Fischer P, Schulz-Hardt S, Frey D. Selective exposure and information quantity: how different information quantities moderate decision makers' preference for consistent and inconsistent information. *J Pers Soc Psychol.* 2008;94(2):231-44. PMID: 18211174
387. Booth BM, Walton MA, Barry KL, Cunningham RM, Chermack ST, Blow FC. Substance use, depression, and mental health functioning in patients seeking acute medical care in an inner-city ED. *J Behav Health Serv Res.* 2011;38(3):358-372. PMID: 21086057
388. Verdier M, Routsolias JC, Aks SE. Naloxone prescriptions from the emergency department: an initiative in evolution. *Am J Emerg Med.* 2019;37(1):164-5. PMID: 29804791
389. O'Brien DC, Dabbs D, Dong K, Veugelers PJ, Hyshka E. Patient characteristics associated with being offered take home naloxone in a busy, urban emergency department: a retrospective chart review. *BMC Health Serv Res.* 2019;19(1):1-12. PMID: 31488142
390. Dong KA, Brouwer J, Johnston C, Hyshka E. Supervised consumption services for acute care hospital patients. *CMAJ.* 2020;192(18):E476-E479. PMID: 32366467
391. Kosteniuk B, Salvalaggio G, McNeil R, Brooks HL, Dong K, Twan S, Brouwer J, Hyshka E. "You don't have to squirrel away in a staircase": patient motivations for attending a novel supervised drug consumption service in acute care. *Int J Drug Policy.* 2021;103275. PMID: 34020865
392. McAdam M, Brar R, Young S. Initiation of injectable opioid agonist treatment in hospital: A case report. *Drug Alcohol Rev.* 2020;39(2):138-141. PMID: 31814186
393. Raheemullah A, Lembke A. Initiating opioid agonist treatment for opioid use disorder in the inpatient setting: a teachable moment. *JAMA Intern Med.* 2019;179(3):427-8. PMID: 30640372

394. Green TC, Bratberg J, Finnell DS. Opioid use disorder and the COVID 19 pandemic: a call to sustain regulatory easements and further expand access to treatment. *Subst Abus.* 2020;41(2):147-9. PMID: 32314951
395. Karamouzian M, Johnson C, Kerr T. Public health messaging and harm reduction in the time of COVID-19. *Lancet Psychiatry.* 2020;7(5):390-1. PMID: 32353270
396. Conway B, Truong D, Wuerth K. COVID-19 in homeless populations: unique challenges and opportunities. *Future Med.* 2020;331-4. DOI:
397. Tsai J, Wilson M. COVID-19: a potential public health problem for homeless populations. *Lancet Public Health,* 2020;5(4):e186-e187. PMID: 32171054
398. Hyshka E, Dong K, Meador K, Speed K, Abele B, LeBlanc S, McFarlane A, McNeil R, Salokangas E, Schoen E, et al. Supporting people who use substances in shelter settings during the COVID-19 pandemic. *Canadian Research Institute in Substance Misuse.* 2020. Available from: <https://crism.ca/wp-content/uploads/2020/06/CRISM-Guidance-Supporting-People-Who-Use-Substances-in-Emergency-Shelter-Settings-V1.pdf>
399. Brown AF, Ma GX, Miranda J, Eng E, Castille D, Brockie T, Jones P, Airhihenbuwa CO, Farhat T, Zhu L. Structural interventions to reduce and eliminate health disparities. *Am J Public Health.* 2019;109(S1):S72-S78. PMID: 30699019
400. Williams DR, Costa MV, Odunlami AO, Mohammed SA. Moving upstream: how interventions that address the social determinants of health can improve health and reduce disparities. *J Public Health Manag Pract.* 2008;14 Suppl(Suppl):S8-17. PMID: 18843244
401. Baker EA, Metzler MM, Galea S. Addressing social determinants of health inequities: learning from doing. *Am J Public Health.* 2005;95(4):553-555. PMID: 15798106

Appendices

Appendix A: Semi-structured interview guide (Study 1)

We are interviewing you today to find out more about what staff at the Royal Alexandra Hospital [RAH] think about homelessness and unstable housing amongst patients at the Royal Alexandra Hospital, and how the Addiction Recovery and Community Health [ARCH] team and the hospital could better address this issue. We are interviewing you because you were identified as someone who has been in direct or indirect contact with patients who are unstably housed or homeless, ARCH patients, and/or the ARCH team. We are interested in hearing your perspective on how social services are provided to unstably housed or homeless patients at the RAH, including the approaches ARCH and other social service providers (i.e. unit social workers, homeless transition coordinator) use to connect patients to housing, income, and other social supports. We would also like to hear your opinions on how ARCH and other social services providers could improve the social determinants of health for RAH patients who are homeless or unstably housed. This includes barriers and facilitators to improving care for ARCH patients and others who are unstably housed or homeless. Just a reminder before we start that no one outside of this room will be able to identify you based on what you say about the hospital or the ARCH team, so please be as open as possible.

Topic Area I: Experience with patients experiencing unstable housing or homelessness

QUESTIONS:	PROBES:
Can you tell me how your position brings you into contact with patients who are unstably housed or homeless, ARCH patients, or the ARCH team?	<ul style="list-style-type: none"> • What is your specific position and role? • How often do you encounter unstably housed or homeless patients? • How often do you encounter patients that are being seen by the ARCH Team?
How does the hospital identify patients who are homeless or unstably housed?	<ul style="list-style-type: none"> • What are barriers/facilitators to identifying unstably housed or homeless patients? • Are patients routinely asked about their housing?
How can the RAH better track patients experiencing homelessness?	<ul style="list-style-type: none"> • What would help units identify all patients in need of housing support? • How should housing status be captured in health records?
What is your experience providing care to homeless or unstably housed patients?	<ul style="list-style-type: none"> • Specific examples/incidents • How does providing care for an unstably housed, or homeless patients differ from providing care to other patients, if at all? • What makes it easy to care for patients who are homeless? What makes it difficult to care for patients who are homeless?

<p>What factors influence patient access to housing in the community?</p>	<ul style="list-style-type: none"> • Are there any obstacles that prevent patients from finding housing? • What kinds of resources are available in the community to help patients find housing?
--	--

Topic Area II: RAH model of social care

QUESTIONS:	PROBES:
<p>What kind of social work supports do RAH patients have access to?</p>	<ul style="list-style-type: none"> • How would you describe the RAH approach to supporting the social situation of patients? • Are these supports available to all RAH patients? • How does this differ for ARCH patients, if at all? • Probe for specific income, housing, identification, and other social supports? • How much emphasis is put on finding patients housing while they are hospitalized?
<p>Who provides social work supports to unstably housed or homeless RAH patients?</p>	<ul style="list-style-type: none"> • How often are Royal Alex social workers involved? • How often is the ARCH social worker involved? • How often is the Community and Social Services Homeless Transition Coordinator involved? • How often are other ARCH/hospital clinicians involved? • How often are staff from Housing First teams involved? • How often are social workers from community organizations involved?
<p>Are the social supports offered by the RAH the same or different than what would be available in the community? In what way?</p>	<ul style="list-style-type: none"> • How does hospital social work differ from social work practice in community settings? • Does the ARCH team offer any social work services that are not typically available? What are they?
<p>What is the impact of the social work provided at RAH on unstably housed or homeless patients?</p>	<ul style="list-style-type: none"> • Probes for: housing, health outcomes, social outcomes • How well does the current model meet patients' social needs? • Are the impacts the same or different for ARCH patients, who also have access to an ARCH social worker?

<p>What is the impact of the RAH model of social care on you, as a [position title]? On other social service providers?</p>	<ul style="list-style-type: none"> • Does this model make your job more or less difficult? • Does this model make your colleagues work more or less difficult?
--	--

Topic Area III: Collaboration between RAH social work, community social work, and ARCH social work

QUESTIONS:	PROBES:
<p>How do RAH social workers collaborate with community-based social service providers?</p>	<ul style="list-style-type: none"> • Probe for their involvement/collaboration with, Homeless Transition Coordinator, Human Services staff, community-based social workers, Housing First team, etc. How would you describe the strengths of these collaborations? The weaknesses/challenges of these collaborations? • How does the hospital social worker/social support staff communicate and collaborate with a patient’s supports in the community? • How would you suggest these collaborations could be improved?
<p>How does the ARCH social worker collaborate with unit social workers?</p>	<ul style="list-style-type: none"> • How would you describe the strengths of these collaborations? The weaknesses/challenges of these collaborations? • How would you suggest these collaborations could be improved?
<p>What value, if any, does the ARCH team social worker bring to RAH?</p>	<ul style="list-style-type: none"> • Strengths of this role? • Weaknesses of this role? • Are there other things the ARCH SW should be doing? • Can unit social workers fill the ARCH team social worker’s role?
<p>How would you change the role of the ARCH team social worker or the way they interact with other RAH staff? Patients?</p>	<ul style="list-style-type: none"> • What would you change about the ARCH’s model of patient care/model of social stabilization? • What would you change about the ARCH team social worker’s process? • What would you change about the way the ARCH team social worker communicates or collaborates with other RAH staff?

Topic Area IV: Improving RAH and ARCH social work services for patients who are unstably housed or homeless

QUESTIONS:	PROBES:
-------------------	----------------

<p>Does it make sense to try and address homelessness in the acute care setting? Why or why not?</p>	<ul style="list-style-type: none"> • How might the RAH be uniquely placed to provide social work services that have been challenging to address in the community setting?
<p>How could the RAH hospital better meet the needs of patients who are unstably housed or homeless?</p>	<ul style="list-style-type: none"> • Probe for specific recommendations related to housing, income support, other social determinants of health
<p>What do you think is the biggest barrier to ending the practice of discharging patients to homelessness or unstable housing?</p>	<ul style="list-style-type: none"> • Other barriers? • What internal or external factors make it harder for the ARCH team or hospital social worker to succeed? • Are these threats/obstacles different or similar for ARCH patients vs. other unstably housed/homeless patients?
<p>What do you think is the biggest strength the RAH has in terms of ending the practice of discharging patients to homelessness or unstable housing?</p>	<ul style="list-style-type: none"> • Other strengths? • What internal or external factors make it easier for hospital social workers to succeed? Are these the same for ARCH social workers?
<p>Do you see value in having a designated Housing First team that operates out of RAH and is for hospital patients? Why/why not?</p>	<ul style="list-style-type: none"> • What would this look like? • How would having a hospital-based Housing First team impact patient care? The broader community?
<p>What other strategies could help improve social work care at RAH for unstably housed or homeless patients?</p>	<ul style="list-style-type: none"> • Probe for specific initiatives related to housing, income support, other social determinants of health
<p>Is there anything else you would like to tell me about social work or unstable housing and homelessness at the RAH?</p>	

Appendix B: Semi-structured interview guide (Study 2)

Thank you for agreeing to take part in this interview today. We are interviewing you because we want to learn more about how illicit drug use is viewed and understood in [PROVINCE/TERRITORY] and how this impacts illicit drug-related harm reduction policymaking there. For the purpose of this interview, illicit drug use refers to the use of any criminally prohibited drugs or the misuse of prescription medications. Just as a reminder, everything you say to me will be kept confidential and will not be shared with anyone outside of the research team.

1. DEFINING THE PROBLEM

- A. When you think about illicit drug use in [PROVINCE/TERRITORY], what issues or areas of concern come to mind? *[interviewer take note of issues/problems listed - use as probes for 3 proceeding questions]*
 - i. What factors contribute to [each issue or problem]?
 - ii. Who is mainly impacted by [each issue or problem]?
 - iii. Does everyone agree that [each issue or problem] is a concern?
 - 1. *Who disagrees and why?*
 - iv. In your view, what is the most pressing illicit drug-related issue or problem in your [PROVINCE]?

2. DEFINING SOLUTIONS

- A. Can you describe the provincial approach to responding to illicit drug use in [PROVINCE/TERRITORY]?
 - i. What solutions are most commonly proposed for addressing illicit drug use in [PROVINCE/TERRITORY]?
 - ii. Who is proposing [each of] these solutions? *(probe: healthcare professionals, government, people who use drugs, police)*
 - iii. What type of arguments are used in support of [each of] these solutions?
- B. To what extent do discussions around illicit drug use in [PROVINCE/TERRITORY] include harm reduction?
 - i. Who vocally supports harm reduction?
 - ii. What type of arguments are used in support of harm reduction?
- C. Are there any vocal opponents to harm reduction in [PROVINCE/TERRITORY]?
 - i. If so, who are they?
 - 1. *What are their arguments against harm reduction?*

3. BACKGROUND

- A. What is your definition of harm reduction?

- i. How does this definition compare to how your [PROVINCIAL OR TERRITORIAL] government defines harm reduction?
 - B. Tell me about your work, and how it relates to harm reduction policymaking in [PROVINCE/TERRITORY]?
 - i. How long have you been working in this position?
 - ii. What other harm reduction-related positions have you held?
- 4. HARM REDUCTION POLICY IN [PROVINCE/TERRITORY]
 - A. What are the main formal policy documents or strategies relevant to harm reduction in [PROVINCE/TERRITORY]?
 - i. What harm reduction policies exist at the regional health authority level?
 - 1. *Is harm reduction addressed in addiction and mental health strategies or STBBI policy at this level?*
 - ii. What harm reduction policies exist at the provincial/territorial level?
 - 1. *Is harm reduction addressed in addiction and mental health strategies or STBBI policy at this level?*
 - iii. How current are these policies?
 - B. To what degree is formal [PROVINCIAL/TERRITORIAL] harm reduction policy reflected in actual practice?
 - 1. *How have policies been implemented?*
 - 2. *Has funding been allocated to implement these policies?*
 - 3. *Have any particular areas been neglected in implementation?*
 - C. Who is responsible for harm reduction policy in your [PROVINCE/TERRITORY]?
 - i. What area of government has the most responsibility for harm reduction policy?
 - ii. Do other areas of government also play a role?
 - iii. Are there non-governmental actors that are also influential?
 - D. What is the impact of current [PROVINCIAL/TERRITORIAL] harm reduction policy on your work or your organization?
- 5. LOOKING FORWARD
 - A. What does the future of harm reduction in [PROVINCE/TERRITORY] look like?
 - i. Why do you come to that conclusion?
 - B. What factors facilitate the establishment of harm reduction services in [PROVINCE/TERRITORY]?

- C. What factors deter the establishment of harm reduction services in [PROVINCE/TERRITORY]?

- D. Is there anything else you would like to share about harm reduction in [PROVINCE/TERRITORY]?

Appendix C: Frameworks guiding block coding (Study 2)

Government of Canada's 12 SDH [358]		
1. Income and social status	5. Physical environments	9. Biology and genetic endowment
2. Employment and social status	6. Social supports and coping skills	10. Gender
3. Education and literacy	7. Healthy behavior	11. Culture
4. Childhood experiences	8. Access to health services	12. Race/racism
Raphael's seven SDH discourses [359]		
1. SDH as identifying those in need of health and social services	4. SDH as indicating the material living circumstances that differ as a function of group membership	6. SDH and their distribution as results of economic and political structures and justifying ideologies
2. SDH as identifying those with modifiable medical and behavioral risk factors	5. SDH and their distribution as results of public policy decisions made by governments and other societal institutions	7. SDH and their distribution as results of the power/influence of those who create and benefit from health and social inequalities
3. SDH as indicating the material living conditions that shape health		
Rhodes risk environment framework [58]		
	Micro-environment	Macro-environment
Physical		
<i>Risk</i>	Drug using, injecting and sex work locations Drug injecting in public spaces Prisons and detention centres	Drug trafficking and distribution routes Trade routes and population mobility Geographical population shifts and population mixing
<i>Intervention</i>	Creating safer drug using sites (e.g. sharps disposal, lighting) Developing supervised injecting facilities Prison-based harm reduction interventions	Changes to trafficking interdiction policies Interventions at truck stops and train stations Cross-border interventions
Social		
<i>Risk</i>	Social and peer group 'risk' norms Local policing practices and 'crackdowns' Community health and welfare service access and delivery	Gender inequalities and gendered risk Stigmatisation and marginalisation of drug users Weak civil society and community advocacy
<i>Intervention</i>	Social network and peer-based interventions Police partnership and training projects	Fostering collective actions in combination with policy changes Mass media and social marketing of harm reduction

	Developing low threshold accessible services for drug users	Strengthening civil society infrastructure and self-help
Economic		
<i>Risk</i>	Cost of living and of health treatments Cost of prevention materials Lack of income generation and employment	Lack of health service revenue and spend Growth of informal economies Uncertain economic transition
<i>Intervention</i>	Subsidised and free treatment Distribution of free prevention materials Micro-economic enterprise and employment schemes	Increase investment in harm reduction relative to enforcement National health insurance schemes Laws governing employment rights
Policy		
<i>Risk</i>	Availability and coverage of clean needles and syringes Programme-level policies governing distribution of materials Access to low-threshold and social housing	Public health policy governing harm reduction and drug treatment Laws governing possession of drugs Laws governing protection of human and health rights
<i>Intervention</i>	Scaling-up pharmacy-based syringe provision Secondary syringe distribution programmes Hostel-based and housing neighbourhood development	Legal reform enabling the scaling-up of harm reduction Legal reform enabling the protection of drug user rights National policy changes regarding public health strategy

Bourgeois et al.'s structural vulnerability assessment tool [55]

<u>Financial security</u> Enough money to live comfortably—pay rent, get food, pay utilities, telephone	<u>Food access</u> Adequate nutrition and access to healthy foods	<u>Education</u> Level of education, ability to read, understand documents
<u>Residence</u> Safe, stable place to sleep and store possessions	<u>Social network</u> Friends, family, or other people who help when needed	<u>Discrimination</u> Based on skin color, accent, where from, gender, sexual orientation, any other reasons
<u>Risk environments</u> Places spent time each day feel safe and healthy	<u>Legal status</u> Any legal problems	

SDH: social determinants of health