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Emergency Department Registered Nurses' Perceptions of Substance Use Disorders and Supervised Consumption Sites

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By

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ABSTRACT

Background: Canada is facing increased drug-related harms; thus, a stronger emphasis has been placed on harm reduction strategies such as supervised consumption sites (SCSs). There is a lack of literature on emergency department (ED) registered nurses' (RNs) perceptions of SCSs and substance use disorders (SUDs), especially in small to mid-sized Canadian cities.

Purpose: This study aimed to determine ED RNs' perceptions of SUDs and SCSs in Southwestern Ontario hospitals.

Methods: A 27-question survey was sent to RNs currently working in EDs in Southwestern Ontario using an online Qualtrics® link. The research explored ED RNs' perception of SCSs and SUDs.

Results: Quantitative results indicated that ED RNs *(n = 146)* were understanding of drug use and SUDs but felt neutral towards SCSs. They indicated positive impacts and potential concerns of SCSs implementation, however most ED RNs reported that they would still refer their patients to such sites if one was available, despite their apprehensions.

Conclusion: This research demonstrates the importance of harm reduction education in nursing curricula and the workplace. Recommendations include a harm reduction referral partnership between the ED and community partners. It is essential to advocate for policy development to include universal assessments of all patients on admission to the ED and encourage legislation that supports ethical policies and procedures that increases the use and access to SCSs.

DEDICATION

I would like to dedicate this thesis to my “littlest” love, Mateo. You have no idea how much you mean to me. I love watching you grow, and I am so excited for the bright future that is ahead of you. I love you so much.

ACKNOWLEDGEMENTS

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To my husband and best friend, who has been nothing short of supportive, encouraging, a team player, and the best dad to our son, I couldn't do life without you. You have seen every good and bad day I've had and still loved me through it all. To my parents, thank you for all the sacrifices you have made for me and for encouraging me to achieve my potential. I am eternally grateful to you for moulding me into the person I am today. To my sissy, you are one of the most selfless people I know. Thank you for always being there and for celebrating every milestone with me thus far. To my in-laws, thank you for welcoming me into your family and raising such an amazing son that I get to spend the rest of my life with. To my second seka, thank you for always looking out for us, no matter how old we are. We know we can always count on you for anything. Finally, to all my friends, thank you for all the memories we have created together throughout the years. I am truly fortunate to have such lifelong friends.

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LIST OF ABBREVIATIONS/SYMBOLS

Abbreviation	Meaning	Page
CNA	Canadian Nurses Association	15
ED	Emergency Department	2
PWUD	People Who Use Drugs	3
RN	Registered Nurse	4
RNAO	Registered Nurses' Association of Ontario	3
SCS	Supervised Consumption Site	3
SUD	Substance Use Disorder	1

CHAPTER 1
INTRODUCTION AND BACKGROUND

Substance use has a tremendous impact on individuals, families, and communities. Its effects are extensive on a global, federal, provincial, and municipal level. Globally, approximately 36.3 million people experience drug use disorders, meaning that their drug use may be causing drug dependence and/or requiring treatment (United Nations Office on Drugs and Crime [UNODC], 2021c). The prevalence of individuals affected by drug use disorders has increased significantly from 30.5 million in 2016 to 36 million in 2019 (UNODC, 2021c). Opioids pose the most harm to the health of those who use drugs due to their severe health consequences, such as overdose (UNODC, 2021c). Roughly 500,000 deaths worldwide are because of drug use, with 70% of all deaths attributed to the use of opioids, and more than 30% to overdose (World Health Organization [WHO], 2021). It is estimated that 11.3 million people inject drugs (WHO, 2017). Injection drug use was one of the leading causes of new hepatitis C virus infections and accounted for 1.75 million (23%) new infections globally (WHO, 2017) and 10% of new human immunodeficiency virus (HIV) infections (The Joint United Nations Programme on HIV/AIDS, 2020).

The global effect of substance use and abuse has been evident, and Canada has been greatly affected. Approximately one-fifth or six million Canadians will experience addiction or substance use disorder (SUD) in their lifetime (Moore, 2021). Canada is also currently facing a national opioid overdose crisis (Government of Canada, 2022a). This crisis has further been exacerbated by the COVID-19 pandemic (Government of Canada, 2022a). There was a total of 22,828 opioid overdose deaths between January 2016 and

March 2021, and an 88% increase in opioid overdose deaths between April 2020 and March 2021 in Canada (Government of Canada, 2022a). Fentanyl and fentanyl analogues accounted for 87% of all accidental opioid deaths (Government of Canada, 2022a). This further contributed to a 62% increase in responses by emergency medical services for suspected opioid-related overdoses and a 27% increase in opioid overdose hospitalizations (Government of Canada, 2022a). While the rates have constantly remained high in the western parts of Canada, such as British Columbia and Alberta, a considerable increase has recently been detected in Ontario (Government of Canada, 2022a). Cumulatively 90% of all opioid deaths in Canada are attributed to residents of these three provinces (Government of Canada, 2022a). Similarly, Windsor-Essex County has been affected by substance use as well. The number of opioid overdoses and opioid-related deaths has been steadily increasing annually in this area (Windsor Essex County Health Unit [WECHU], 2021). Nearly three-quarters (73.9%) of accidental opioid-related deaths happened in private dwellings, over half (52.2%) of opioid-related deaths occurred when the person was using drugs alone, and in approximately three-quarters (73.9%) of opioid-related deaths, naloxone was not used (WECHU, 2021). The WECHU surveillance and monitoring system have identified an increased number of opioid-related emergency department (ED) visits and substance-use-related emergency medical service calls in February, March, and April 2022 (WECHU, 2022c). Eight alerts were called for increased substance misuse and overdose-related ED visits between May 2019 and May 2020 in Windsor-Essex County (WECHU, 2022c). In 2021, there were 403 confirmed opioid overdose ED visits, almost double the number recorded (265) between 2019 and 2020 combined (WECHU, 2022b). Opioid-related ED visits quadrupled in number in just

four years (108 in 2016 versus 442 in 2021) (WECHU, 2022b). Additionally, the number of opioid-related hospitalizations has also been steadily increasing during that same time (WEHCU, 2022b). There were approximately 2695 drug-related ED visits between 2019 and 2021 with males aged 25-44 being the most likely group to have an opioid-related ED visit and the group that contributed to the most opioid-related deaths (WECHU, 2022b). Lastly, fentanyl was identified as the most common opioid that caused 65% of all opioid-related deaths in Windsor-Essex County (WECHU, 2022b).

With increasing drug-related harms, a stronger emphasis has been placed on harm reduction strategies (Kerr et al., 2017). Harm reduction is a public health approach that is aimed at reducing adverse health, social, and legal impacts of at-risk actions such as drug use (Harm Reduction International, 2022). The Registered Nurses' Association of Ontario (RNAO) (2022b) views harm reduction, including supervised consumption services as an essential tool that nurses can use to assist people who use drugs (PWUD), minimize the stigma that surrounds substance use and addiction, and in turn, build healthier communities. Supervised consumption sites (SCSs) are defined as legally sanctioned spaces where people can use their own drugs in a safe and clean environment in the presence of trained personnel (Government of Canada, 2021b). They are a form of harm reduction and can offer a range of different services within them such as drug checking that detects the contents of the drugs, emergency medical care, access to counselling, rehabilitation, and access to other health and social services such as referrals to substance use or mental health treatments, and education on harms of drug use or safer consumption practices (Government of Canada, 2021b). These sites are also a place where people can safely dispose of needles and sharps, obtain new drug equipment,

receive basic health services, get tested for infectious diseases, and gain access to medications such as naloxone, an opioid overdose reversal agent (Government of Canada, 2021b). Establishing these sites aims to save lives by reducing overdoses and deaths caused by drug use and connecting PWUD to social and health services and treatments when they are ready and willing (Government of Canada, 2021b). Moe et al. (2022) found that people with SUDs are among those who make persistent, frequent ED visits in Ontario. Thus, we need to understand the risk factors that contribute to persistent ED use, explore the healthcare needs of those who frequent the ED the most, and advocate for alternatives that better address the care gaps in our healthcare system (Moe et al., 2022). An ED visit has been recognized as an opportunity to improve patient outcomes by identifying those with SUDs and connecting them to treatment (Hawk & D'Onofrio, 2018). Since nurses spend most of their time communicating and interacting with patients (Yen et al., 2018), they are in a unique position to have a big influence on patients and their health. It is therefore important to understand their perceptions on certain topics, as their influence can negatively or positively affect the patient and the care they receive. Thus, this thesis assessed emergency registered nurses' (RN) perceptions of SUDs and SCSs in Southwestern Ontario EDs. The specific research questions were:

1. What are ED RNs' level comfort and experience with people who have been diagnosed or have a suspected SUD?
2. What are ED RNs' level of comfort and experience with SCSs?
3. What are ED RNs' views toward SUDs and SCSs?

4. What do ED RNs identify as the impact of SCSs for people who use drugs, the ED, the healthcare system, and the community?
5. What services do ED RNs identify SCSs and their ED should offer?

Theoretical Framework

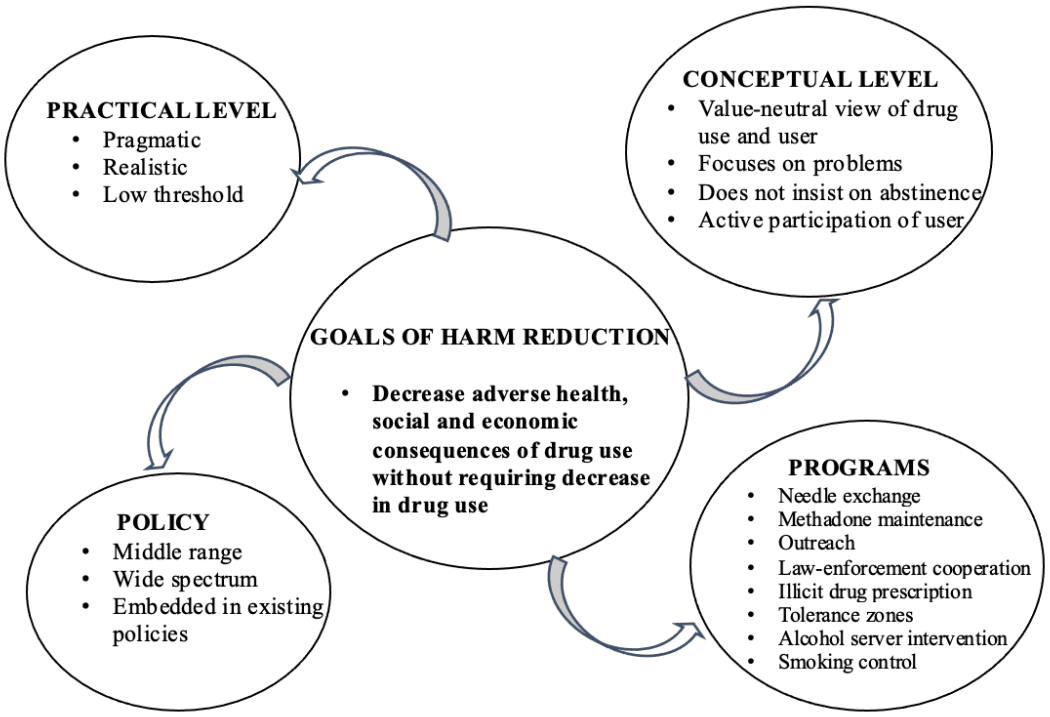
According to the International Harm Reduction Association (2022), harm reduction is not based solely on the absence of using drugs. Instead, the goal is to minimize the negative health, social, and legal effects of using drugs while ensuring PWUD receive justice and have their human rights protected (International Harm Reduction Association, 2022). The Harm Reduction Model (see Figure 1) (Cheung, 2000) served as the theoretical foundation for this study as it aligned with the objectives of harm reduction. The model's approach is focused on public health principles rather than judgements on drug use (Cheung, 2000). Harm reduction aims to decrease the negative effects of drug use without complete abstinence (Cheung, 2000). Emphasis is placed on the reduction of drug-related harm through pragmatic, realistic, and low-threshold means at the practical level (Cheung, 2000). At the conceptual level, drug use and the person who uses drugs are viewed in a value-neutral and humanistic way (Cheung, 2000). The focus is on drug use, abstinence is not insisted on, and active participation in harm reduction is often encouraged of the PWUD (Cheung, 2000). At the policy level, harm reduction creates a variety of middle-range policy measures that match drug use patterns and problems and can occasionally be adapted to existing policies (Cheung, 2000). Lastly, examples of harm reduction strategies that can be implemented are needle exchanges, methadone maintenance or outreach programs, law enforcement cooperation, prescriptions for illicit drug such as heroin, tolerance zones where people can use drugs in a safe and clean space, alcohol server interventions, and tobacco

programs that range from smoking control in public to the use of tobacco alternatives such as nicotine gum and patches (Cheung, 2000). The emergence of this harm reduction model does not signify prohibitionist or legalizationist advances, but rather it is created as an approach to face the drug epidemic in the 21st century (Cheung, 2000).

For this thesis, the Harm Reduction Model was used as a guide to assess ED RNs' perceptions of SUDs and SCSs and to determine whether their perceptions compared to the harm reduction goals of this model. Figure 1 demonstrates "value-neutral views" and the avoidance of extreme judgements towards drug use while focusing on harm reduction through low-threshold programs. Thus, this model aided in the exploration of ED RNs' views towards SUDs and SCSs, as well as the level of support toward SCSs as a harm reduction program.

Figure 1

Harm Reduction Model



Note. Used with permission from Cheung (2000)

CHAPTER 2

LITERATURE REVIEW

Search Strategy

A detailed review of current scholarly research was conducted to effectively understand nurses' perceptions of SUDs and SCSs. The databases included the Cumulative Index of Nursing and Allied Health Literature (CINAHL), ProQuest Nursing and Allied Health Source, Ovid Medline, PubMed, and Google Scholar. Keywords used individually and in combination were "safe injection site or facility," "supervised sites," "safe or supervised consumption sites," "harm reduction," "overdose prevention," "people who use drugs," "drug use," "inject*," "overdose," "overdose death," "opioids," "mortality," "morbidity," "substance use or abuse," "substance use disorder," "perceptions," "opinions," "views," "attitudes," "perspectives," "emergency department or room," and "nurs*." Search criteria included academic articles published in the English language between the years 2012 to 2022. The population of interest included nurses who worked in the ED, and the research was focused on their perceptions of SUDs and SCSs. A title and abstract screen were then conducted. Articles were included if they discussed perceptions or perspectives, opinions, views, and attitudes towards SUDs, safe injection sites, or SCSs or facilities. Research involving PWUD, stakeholders, community members, businesspersons, emergency medical service personnel, government officials, and physicians were included as this data was used as a comparison to our study population. Articles were excluded if the title or abstract did not discuss SUDs or SCSs. Duplicate studies among databases were removed.

Moreover, ancestry and descendancy approaches were employed. Grey literature was then searched to emphasize statistical trends of the effects of drug-related harms. A university librarian was also consulted to ensure that the search terms and strategies used were comprehensive for the research topic. A total of 36 research studies and 22 grey literature sources were included in this literature review.

Trends in Harm Reduction

There is limited availability of and access to drug treatment services globally for people with drug use disorders, and only one in eight people with drug use disorders receive treatment every year (UNODC, 2021c). Thus, harm and other negative consequences associated with drug use continue to increase, including overdose, death, liver cancer, cirrhosis, and other chronic liver diseases complicated by hepatitis C (UNODC, 2021c). This is especially true for individuals with opioid-use disorders (UNODC, 2021c).

It has been noted that harm reduction implementation has stalled since 2014 and has worsened since 2018 (Global State of Harm Reduction, 2020). Low- and middle-income countries have a 95% funding gap for harm reduction (Harm Reduction International, 2021). The COVID-19 pandemic has also shrunk donor investments in harm reduction for these countries (Harm Reduction International, 2021). Moreover, rural communities are underserved especially in many regions and countries worldwide (Harm Reduction International, 2020). Some approaches to harm reduction do exist, but they are designed to better serve specific populations, with most services worldwide being primarily male-focused (Global State of Harm Reduction, 2018). Many other population subgroups, such as people who use stimulant or non-injecting drugs, men who have sex

with men, and people experiencing homelessness lack tailored services to meet their needs (Harm Reduction International, 2020). In some countries, women who use drugs are stigmatized and frequently overlooked due to unfair and outdated expectations of a woman's societal role (Global State of Harm Reduction, 2018; Harm Reduction International, 2020). Other barriers to harm reduction in some countries are their political and legal environments demonizing and criminalizing PWUD (Global State of Harm Reduction, 2018). These hostile political and legal perceptions create barriers to those who want to access health and social services (Global State of Harm Reduction, 2018; Harm Reduction International, 2020). Even where harm reduction services exist, the services are often lacking coverage or quality (Harm Reduction International, 2020).

Impact of the COVID-19 Pandemic on Substance Use

The COVID-19 pandemic worried PWUD about drug availability, quality, degree of contamination, potency, cost, and ability to access drugs (Canadian Centre on Substance Use and Addiction, 2020). Although the pandemic greatly impacted public health, the economy, and everyday life, the drug market remained resilient to these changes (Gaume et al., 2021; UNODC, 2021a). Organized crime groups quickly adjusted to these new circumstances, and drug trafficking continued at nearly the same pace as before the pandemic (Gaume et al., 2021; UNODC, 2021a). New routes for drug trafficking were introduced, and existing patterns were enhanced (UNODC, 2021a). The pandemic intensified the use of private aircraft and maritime and water routes to bypass the border closures, increased drug shipments, and compensated for reduced commercial flights and more significant challenges in trafficking by land (UNODC, 2021a). Shifts in drug use also occurred (UNODC, 2021a). The closures of social and recreational venues,

along with increased stress, boredom, and reduced financial resources, triggered an increase in cannabis and non-medical use of pharmaceutical drugs, such as benzodiazepines instead of stimulants, such as ecstasy, lysergic acid diethylamide, and cocaine (UNODC, 2021a) The pandemic and the resulting lockdowns further disturbed the health of PWUD (Canadian Center on Substance Use and Addiction, 2020; UNODC, 2021a). Many critical services, programmes, and treatment centers were interrupted, causing an increase in overdose deaths (UNODC, 2021a). People lost social connections and support, which increased their feelings of isolation, fear, and anxiety (Canadian Center on Substance Use and Addiction, 2020). The disruptions in accessing services due to the COVID-19 pandemic have further contributed to a rise in new HIV infections in people who inject drugs (Harm Reduction International, 2021). Moreover, PWUD had reduced mobility, greater unemployment, and spent more time at home, impacting the trade flow and trafficking opportunities (UNODC, 2021a). Thus, contactless methods to deliver drugs to consumers were created and implemented more often (UNODC, 2021a). Web-based drug sales increased nearly four-fold from 80 million dollars between 2011 and mid-2017 to 315 million in 2020. (UNODC, 2021b). These pandemic trends are expected to prevail, which can further increase the negative consequences for PWUD, such as poverty, inequality, and mental health conditions from a lack of opportunities for growth (UNODC, 2021a). It is also predicted that the post-COVID-19 economic crisis will expand drug cultivation and trafficking, with food insecurity intensifying illicit drug cultivation and protection (UNODC, 2021b). In addition, drug use is projected to increase, accelerating the progression of drug use disorders (UNODC, 2021b).

Correspondingly, urgent investment in harm reduction is necessary to combat these issues (Harm Reduction International, 2021).

SCS as an Accepted Harm Reduction Strategy

In 1986, the first-ever SCS was opened in Berne, Switzerland (European Monitoring Centre for Drugs and Drug Addiction, 2018). In 2003, Insite, North America's first SCS was opened in Vancouver, Canada (Vancouver Coastal Health, 2022). Insite is in Vancouver's Downtown Eastside, where most people who inject drugs long-term are found (Vancouver Coastal Health, 2022). Globally, the following countries have implemented harm reduction approaches by opening at least one drug consumption room: Canada, Australia, Belgium, Denmark, France, Germany, Luxembourg, Netherlands, Norway, Portugal, Spain, and Switzerland (Harm Reduction International, 2021). The United States recently joined these countries in opening its first supervised consumption facility in New York in 2022 (Peltz, 2022). Healthcare delivery in Canada is a provincial and territorial responsibility, which creates variations in harm reduction practices and policies across different parts of the country (Hyshka et al., 2019). However, the Government of Canada supports the implementation of SCSs as an effective harm reduction strategy and has opened 39 SCSs thus far across the country (Government of Canada, 2022c).

Benefits of SCSs

The implementation of SCSs has shown to be very beneficial for decreasing drug-related harms. Supervised consumption sites have proven to reduce opioid-related overdoses and deaths (Behrends et al., 2019; Government of Canada, 2021b; Hayashi et al., 2021; Irvine et al., 2019; Kennedy et al., 2019; Kerr et al., 2007; Madah-Amiri et al.,

2019; Marshall et al., 2007; Milloy et al., 2008; Notta et al., 2019; Olding et al., 2020; Patterson et al., 2018; Pauly et al., 2020; Stoltz et al., 2007). They have decreased drug-related hospital admissions, emergency medical service use (Government of Canada, 2021b; Madah-Amiri et al., 2019), crime (Myer & Belisle, 2018), and HIV and hepatitis C infections due to less reusing and sharing of needles (Bayoumi & Zaric, 2008; Enns et al., 2016; Government of Canada, 2021b; Irwin et al., 2017). As a result of SCSs in the community, there have been fewer rushed injections and drug injecting alone reported by PWUD (Government of Canada, 2021b; Hayashi et al., 2021; Kerr et al., 2007; Notta et al., 2019; Pauly et al., 2020). Additionally, the presence of SCSs increased access to social services, the use of detox treatments (Bayoumi & Zaric, 2008; Government of Canada, 2021b; Irwin et al., 2017; Wood et al., 2007) and cost savings (Bayoumi & Zaric, 2008; Government of Canada, 2021b; Irwin et al., 2017; Khair et al., 2022).

Names for SCSs

Supervised consumption sites are also known as safe injection facilities (Kennedy et al., 2019; Kerr et al., 2007; Madah-Almiri et al., 2019), supervised injection sites (Notta et al., 2019), supervised injection facilities (Behrends et al., 2019; Irwin et al., 2017), medically supervised safer injecting facilities (Marshall et al., 2011; Milloy et al., 2008; Stoltz et al., 2007), overdose prevention centres (Pauly et al., 2020), harm reduction sites (Olding et al., 2020), and drug consumption rooms (Harm Reduction International, 2021). In this thesis, the term supervised consumption sites was used to encompass these variations in names and services.

Preferred Characteristics of SCSs

People who use drugs reported that they are most likely to access a SCS if it provides safety from police, there is entry into withdrawal management, and they could obtain new needles (Kenney et al., 2021). Additionally, they reported that drug checking was a highly desired and very important service as it made them feel more knowledgeable about the drugs they were consuming (Kennedy et al., 2018; Olding et al., 2020). People who use drugs highly appreciated the presence of healthcare staff at the SCSs because the staff could provide emergency treatments. Subsequently, PWUD felt safer when injecting adulterated drugs or drugs with unknown purity and composition (Kerr et al., 2007). Having peer staff present was also a valuable service as they can help assess people's tolerance and prevent overdose by advising them to start with lower doses (Olding et al., 2020).

Structurally, placing a SCS in the neighborhood where most overdose fatalities occurred has been shown to decrease the city's total number of overdose fatalities (Behrends et al., 2019; Marshall et al., 2011). Placing a SCS within 500m of the area where most fatal overdoses have occurred has decreased the fatality rate by 35% (Marshall et al., 2011). When a SCS was closed, more overdoses in public locations occurred, and more overdoses required ambulance transport to the hospital for further management (Madah-Amiri et al., 2019). In conclusion, SCSs should be safe from the police, have withdrawal management, offer new needles (Kennedy et al., 2021), have drug checking (Kennedy et al., 2018; Olding et al., 2020), be staffed by healthcare professionals (Kennedy et al., 2018) and peer staff (Olding et al., 2020), be located where there have been previous overdose fatalities (Behrends et al., 2019; Marshall et al., 2011), and be open 24 hours a day (Madah-Amiri et al., 2019).

People who use drugs reported experiencing barriers to accessing appropriate services. Barriers identified include treatment availability, awareness of and access to effective treatment, fear of stigma, lack of financial means, legal policy, and law-enforcement barriers (Degenhardt et al., 2017). To overcome these barriers, education can be provided to PWUD on the treatments that are available and how they can help (Government of Canada, 2022b). Reassurance can be given that all these services are government-approved and funded (Government of Canada, 2022b), and laws and legal policies that protect PWUD can be explained to mitigate the fear of law enforcement (Government of Canada, 2022b). Lastly, stigma can be reduced by educating the public and becoming a more accepting community, listening with compassion and without judgement, and using person-first language (Government of Canada, 2021a).

Best Practice Recommendations on Harm Reduction

Harm reduction programs such as SCSs should be embedded into existing health and social settings to retain care, reduce inequalities, and improve health outcomes for people who use substances (RNAO, 2018). Nurses should practice reflectively and be aware of their attitudes, values, and perceptions when caring for patients with SUDs (RNAO, 2015; RNAO, 2018). The RNAO (2015) recommends advocating for and supporting access to combined therapy, such as pharmacological and psychosocial interventions, to improve well-being and health outcomes. The RNAO (2015) recommends increasing access to collaborative care for individuals at risk for or experiencing SUD and reducing inequalities through preventing, treating, and supporting these individuals in their recovery.

Nurses' Perceptions Toward SUDs and SCSs

According to WHO (2020), there are 19.3 million professional nurses globally. Nurses account for 59% of all healthcare providers, thus making nursing the largest group in the health sector (WHO, 2020). In Canada in 2019, there were 439,975 regulated nurses with an active licence, and of those, 300,669 were RNs (Canadian Nurses Association [CNA], 2023). The number of RNs licensed to practice in Canada increased to 304,558 in 2020 (Canadian Institute of Health Information, 2021).

Due to the comprehensiveness of the RN curriculum, RNs can develop deeper clinical knowledge and understanding, critical thinking, and research utilization in their practice (RNAO, 2022a). Additionally, RNs can assume responsibility for patients with complex needs and better manage unpredictable conditions (RNAO, 2022a). In Canada, only licensed RNs can work in the ED (Academic Invest, n.d.). People who use drugs represent a very vulnerable population, and they typically go through the ED to receive care. With growing numbers of RNs and emergency nurses often being the first health care provider to see PWUD when coming to the ED, assessing ED RNs' perceptions of SUDs and SCSs is imperative.

Some dated literature indicates that nurses have negative attitudes toward people who use substances (Arabaci, 2016; Chu & Galang, 2013; van Boekel et al., 2013). Nurses' negative attitudes toward PWUD can adversely affect the nurse-client relationship (Arabaci, 2016; Chu & Galang, 2013). Some nurses kept socially distant from PWUD, causing care to be perceived as insecure and unpleasant by PWUD (Arabaci, 2016). It diminished the patients' feelings of empowerment, thus affecting their healthcare outcomes (van Boekel et al., 2013). Nurse involvement with PWUD was also lessened when they had a more task-oriented approach (van Boekel et al., 2013).

Consequently, this resulted in suboptimal patient care (Chu & Galang, 2013; van Boekel et al., 2013), leaving patients feeling mistreated, dehumanized, discriminated against, and stigmatized (Biancarelli et al., 2019). Health professionals often lack sufficient education, training, and role support to care for this population (Arabaci, 2016; Chu & Galang, 2013; van Boekel et al., 2013).

Gaps and Limitations

While there are some studies in the literature about ED nurses' perceptions of SUDs, few were recent, and baseline information about ED nurses' perceptions is lacking for small to mid-sized Canadian cities. Moreover, the perceptions towards SCSs of many people were studied in the literature, such as PWUD, stakeholders, businesspersons, and physicians. However, no recent studies were identified that assessed ED nurses' perceptions of SCSs. As ED nurses are front-line staff who often care for patients with substance use and abuse and its short-term and long-term complications, awareness of their perceptions is essential in creating policy on this contentious topic (Katz et al., 2017).

Knowing the perceptions of ED nurses can help other healthcare providers, administrators, stakeholders, and policymakers create and enforce harm reduction programs and strategies to understand the viewpoints of those directly impacting patient care (Shreffler et al., 2021). It can also aid in gaining insight into whether nurses would support referring patients from the ED to such sites, where PWUD could receive more appropriate care and additional services that would not generally be provided in the ED (Katz et al., 2017). The data from this study provided an understanding of ED RNS' perceptions, allowed for comparison of results with other disciplines, filled gaps in

knowledge, generated new knowledge, and identified areas for improvement in practice, education, and policies that can serve as an opportunity to better patient care and safety.

CHAPTER 3

METHODOLOGY

To answer the study objectives, a quantitative approach was used. This methodology is advantageous because it best studies a large group of people and the researcher can then generalize about a broader group beyond that sample (Holton & Burnett, 2005). In other words, it can use smaller groups of people to make inferences about a larger population (Holton & Burnett, 2005). A descriptive design was also used as it can describe the characteristics of a specific group (Holton & Burnett, 2005), such as perceptions of ED RNs on SUDs and SCSs in this study particularly. The design, questionnaire selection and development, setting and sample, ethical considerations, data collection procedure, and data analysis are described below in greater detail.

Design

This thesis aimed to assess ED nurses' perceptions of SUDs and SCSs. A quantitative study was conducted to answer the question, "What are ED nurses' perceptions of SUDs and SCSs?" Hypotheses were not formulated for this study. The results from this study produced descriptive findings that described ED RNs' level of experience and comfort with SUDs and SCSs, emphasized their views towards SUDs and SCSs, identified the impact SCSs had for PWUD, the ED, the healthcare system, and the community, and identified services that they prioritized to be offered in SCSs and in their EDs.

Questionnaire Selection and Development

A survey tool was created by merging survey questions from three pertinent studies that evaluated support for supervised injection facilities (Katz et al.,

2017), perceptions of implementing harm reduction programs (Jackson et al., 2022), and perceptions related to SUDs (Shreffler et al., 2021). The survey by Katz et al. (2017) was iteratively designed in consultation with content experts in emergency medicine, epidemiology, public health, and preventative medicine. A "think aloud" content and face validity evaluation was completed once a consensus was reached. This occurred with three ED physicians who were not involved in creating the survey. Minor revisions were made before the survey was distributed to improve the clarity of the questions. The survey by Jackson et al. (2022) was developed by a research team that involved researchers, harm reduction workers, an individual with lived experience of SUD, a health professional, and a government stakeholder who all collectively worked in harm reduction for many years. The person with lived experience of SUD pretested the questionnaire, and slight modifications to the wording were made to ensure clarity. Lastly, two female and two male peer researchers with lived experience of SUD were hired and provided with the training. The survey by Shreffler et al. (2021) did not describe the survey development process.

Permission to use sections of the surveys was obtained from the journal in which the studies were published (see Appendix A). Minor revisions to questions were made to improve the clarity and appropriateness of the questions before distribution. The following terms: "safe injection facilities," "safe injection sites," and "safer consumption sites" were changed to "supervised consumption sites" to better describe the supervision role that is provided at the site, as well as ensure inclusivity of all potential routes in which drugs could be consumed within them. Lastly, duplicate or overly similar questions within the studies were removed to prevent repetition.

The structure and content of the survey were reviewed by the thesis committee prior to publishing. The questionnaire (see Appendix B) included a total of 27 questions. Of the 27 questions, four demographic questions were optional (age, gender, ethnicity, and primary worksite), one question ensured the inclusion criteria were met, one asked if respondents confirmed to have their responses submitted, and one invited participants to indicate if they would like to receive compensation and which e-gift card they would prefer. Dillman et al. (2014) found that requiring participants to share their age deters them from completing the survey. The remainder of the questions assessed ED RNs' work, education, and training experiences, their knowledge, experience, and comfort level with SCSs and SUDs, their views of SUDs and SCSs, perceived impact of SCSs in relation to PWUD, their ED, the healthcare system, and the community, and lastly, the services that should be offered in SCSs and in their ED (Jackson et al., 2021; Katz et al., 2017; Shreffler et al., 2022). This survey contained open-ended, closed-ended, multiple choice, multiple-answer, ranking, and matrix (Likert Scale from strongly disagree to strongly agree) questions. In addition to the optional questions, there were force completion questions, where participants were required to answer the question before proceeding to the next one.

Finally, the last question asked participants to provide their contact information if they would like to be contacted for future studies regarding the same topic. If the participant chose "yes" to this question, they were taken to a separate survey where their personal information could not be linked to their survey responses.

Setting and Sample

The setting for this study took place at four Southwestern Ontario hospitals which included five EDs. These EDs provide care for patients in various geographical regions ranging from urban to rural settings. The sample were employees in the EDs of the identified hospitals. To participate in this study, RNs had to currently work in the ED, were entitled to practice with no restrictions with the College of Nurses of Ontario (CNO) and were able to comprehend the English language. Nurses in the study did not need to have experience with SCSs.

Ethical Considerations

Ethics clearance was obtained from the University of Windsor (REB #42546) and from each hospital site involved (REB #20-384) (see Appendix C). Ethics and potential benefits were considered. Physical risks to participation were estimated to be low or not present as there was no personal contact with participants or administration of any substances. All data were collected online. Psychological/emotional risks to participating were medium as some participants may have experienced some level of psychological discomfort or distress in response to the questions as they may have reflected on recent experiences that they may have found to be sensitive or triggering. Social risks were predicted to be medium, as participants may have completed the survey at work, and may have been using the same computers as their coworkers. However, all data collected was kept confidential, was not linked to any identifying information, and participants were encouraged to complete the survey in private. Participants were also reminded that participation in the study would not affect their employment. Managers were informed that if employees had questions regarding the study to direct them to the principal investigator. Dual/multiple relationships were placed at medium risk as

participants may have or had dual relationships with the research team (e.g., social relationships, work relationships, schoolmates, professor/student relationships). To mitigate this risk, the research team members were identified on the recruitment resources and informed consent forms to ensure that participants were fully aware of the team if they were concerned about perceived dual roles or conflicts of interest. All data were deidentified and reported in aggregate format to protect participant identification.

Data Collection Procedure

Data were collected between February and April 2023 following ethics clearances from the University of Windsor and all four hospital sites. The survey was deployed via the University of Windsor Qualtrics® platform and could be accessed through an online link. Eligible ED-employed RNs of Southwestern Hospitals were recruited through a series of e-mail announcements sent by their ED managers. An initial e-mail was sent using the hospital email system to notify the RNs that the survey was available (see Appendix D). An informational poster with a QR code (see Appendix E) that was linked to the survey was also posted in the staff breakroom of the ED, away from patient care and remained posted until the end of the study period. The study period lasted six weeks in length per site. The second email was sent two weeks before the study closed, and the final email was sent one week before the study closed.

Prior to beginning the survey, a non-technical consent form was provided to each participant that included the purpose of the study, participation activities, potential risks and benefits, that participation was voluntary, all data collected would remain confidential, and they could withdraw and any point before survey submission (see Appendix F). Upon survey commencement and completion, participants were

also provided with information about resources available for addiction treatment, drug use, and abuse referral services (see Appendix G). They were given the principal investigator's contact information and the ethics office's information at the University of Windsor and of their own hospital site should they have any questions about the study or their rights as a research participant.

The survey was not timed, and participants could leave the survey and return at any point during the six-week study period at their site. Participants were encouraged to complete the survey in private and were offered optional compensation with either a $15 Tim Horton's gift card or a $15 Starbucks gift card in appreciation for their time and involvement. This amount was determined by using the average RNs' wage of about $45 per hour (Ontario Nurses Association, 2021) and dividing it by three since the survey completion time was expected to take approximately 15 to 20 minutes based on the internal pilot that was performed by three RNs. These RNs had no association with the EDs or hospitals included in the study. It took most ED RNs in this study approximately 15 minutes to complete the entire survey. If participants chose to receive compensation, they were taken to a separate Qualtrics® link not associated with their responses, to provide a preferred email address to receive the gift card. There were 11 incomplete survey responses, which were excluded from data analysis. For incomplete surveys, participants were not offered the gift card compensation option.

Data Analysis

The data were downloaded from Qualtrics® to Microsoft Excel Spreadsheets. Data cleaning was implemented to ensure that no participants submitted the same responses twice and that all respondents met the inclusion criteria. Data were explored for

accuracy of entries, missing data, and normal distribution points. For ethnicity, there were 2% missing data (n = 3) and 6% for gender (n = 9). Data were de-identified, reported in an aggregate format, and stored on an encrypted, password-protected computer. A secured and encrypted master file that included RNs' emails and could only be accessed by the researcher for follow-up was created and retained for RNs who consented and provided their email for participating in any follow-up or related studies related to this topic.

IBM Statistical Package for Social Sciences 29.0 was used for all statistical analyses to determine ED RNs' overall perceptions of SUD and SCSs and a statistician was consulted for analyses. Analyses included descriptive statistics such as frequencies, minimum, maximum, mean, standard deviation (SD), skew, kurtosis, standard error (SE), and bivariate and multivariate analyses. Composite scores were created by combining mean scores of the 5-point Likert Scale from 1 (strongly disagree) to 5 (strongly agree) to indicate meaningful attributes (Song et al., 2013). The composite scores measured 1) the views of ED RNs toward drug use and SUD, 2) the views of ED RNs toward SCSs, and lastly, 3) the impact of SCSs on PWUD, the ED, the healthcare system, and the community. This approach is useful when the variables are highly correlated with each other and can capture an overall outcome of interest (Song et al., 2013). Questions 13a, 13b, 13c, 13d, 13e, 13f, 13g, 13h, 13i, 13j, 13k, 14a, 14b, 14c, 14d, 14e, 15b, 15c, 18e, and 18f in the survey contributed to composite score 1) the views of ED RNs toward drug use and SUD. Question 18e was reverse-coded to contribute to the composite. Questions 16d, 18c, 18d, 18g, 18h, and 18i represented composite score 2) the views of ED RNs toward SCSs. Questions 16d, 18c, 18d, and 18g were reverse-coded. Lastly,

questions 14f, 14g, 14h, 14i, 14j, 15a, 16a, 16b, 16c, 17a, 17b, 17c, 17d, 17e, 17f, 17g, 18a, and 18b contributed to the composite score 3) the impact of SCSs on PWUD, the ED, the healthcare system, and the community. None of the questions were reverse-coded for this composite score. Finally, a reliability analysis was conducted for all three study scales to examine if each evidenced a sufficient level of internal consistency reliability (Cronbach's alpha ≥ 0.70).

CHAPTER 4

RESULTS

Survey Response Rate

A link to the survey was sent to all 341 ED RNs at the participating Southwestern Ontario hospitals. The response rate to the survey was 50.1% (*n* = 171). Of those 171 responses, 25 were excluded due to incomplete survey responses (*n* = 11) and inclusion criteria not being met (*n* = 14). The remaining 146 (42.8%) of the total 341 respondents met the inclusion criteria and were included in the analyses. Table 1 describes the demographic characteristics of the respondents based on those who answered the demographic questions.

Survey Sample Characteristics

Participants' ages ranged from 20 - 61+ years of age. Most RNs were 40 years old or younger (*n* = 100, 68.5%), self-identified as female (*n* = 118, 80.8%), and as white (*n* = 132, 90.4%). Approximately half (*n* = 74, 50.9%) have over 10 years of experience as an RN, one-third have worked in the ED as an RN for one to five years (*n* = 46, 31.5%) and one-third over 10 years (*n* = 50, 34.6%), and most RNs were trained or only worked in Ontario (*n* = 115, 78.8%). Almost all RNs (*n* = 136, 96.3%) reported receiving some education or training on harm reduction. Despite the reported high level of education and training received on harm reduction, ED RNs reported their level of knowledge regarding evidence and operations of a supervised consumption site as primarily low (*n* = 64, 43.8%), or moderate (*n* = 63, 43.2%). Sample characteristics are presented in Table 1.

Table 1

Sample Characteristics of ED RNs (n = 146).

Variable	*n*	%
Age		
20-30 years old	48	32.9
31-40 years old	52	35.6
41-50 years old	25	17.1
51-60 years old	17	11.6
61+ years old	4	2.8
Gender		
Female	118	80.8
Male	19	13.0
Missing	9	6.2
Ethnicity		
White	132	90.4
South Asian (e.g., East Indian, Pakistani, Sri Lankan)	1	0.7
Black	1	0.7
Filipino	1	0.7
Latin American	1	0.7
Arab	4	2.7
Southeast Asian (e.g., Vietnamese, Cambodian, Thai)	2	1.4
Other	2	1.4
Missing	2	1.4
Total Years as a Nurse		
<1 year	7	4.8
1-5 years	34	23.3
6-10 years	31	21.2
>10 years	74	50.9
Years Worked in the ED as a Nurse		
<1 year	19	13.0
1-5 years	46	31.5
6-10 years	31	21.2
>10 years	50	34.6
Worked or Trained Outside of Ontario		
No	115	78.8
Yes	31	21.2
Training/Education Received on Harm Reduction (select all that apply)*		

None	10	4.4
While in school/part of the curriculum	84	36.9
While in hospital orientation	58	25.7
Attended one training/education class on the job	38	16.8
Attended more than one training/education class on the job	32	14.2
Other	6	2.7
Level of Knowledge Regarding Evidence and Operations of a Supervised Consumption Site		
Do not know anything about it	12	8.2
Low level	64	43.8
Moderate level	63	43.2
High level	6	4.1
Very high level (expert)	1	0.7

*Note. This is a select-all-that-apply question, thus sum of the percentages is above 100%.

ED RNs' Experience and Comfort Level Towards SUD

The majority of ED RNs reported that they cared for patients who have a known or suspected SUD at their current workplace daily (n = 111, 76.0%) and two-thirds had either a low (n = 54, 37.0%) or average (n = 49, 33.6%) level of personal experience with people who have a known or suspected SUD. Approximately half of all participants (n = 72, 49.2%) felt comfortable interacting with this population. Almost all ED RNs have treated the following patients in the past six months: Suspected or admitted to using intravenous recreational drugs (n = 141, 96.6%), suspected or admitted to smoking drugs such as crack-cocaine or methamphetamine drugs (n = 141, 96.6%), presented with an abscess or other bacterial infection suspected or known to be related to injection drug use (n = 138, 94.5%), presented with systemic infections (e.g., endocarditis, deep-vein thrombosis) suspected or known to be related to injection drug use (n = 128, 87.7%), presented with another type of recreational drug overdose (n = 133, 91.1%), and presented with an opiate overdose (n = 136, 93.2%).

ED RNs' Experience and Comfort Level Towards SCSs

Most ED RNs reported they had no experience (*n* = 78, 53.4%) or a low level of experience (*n* = 47, 32.2%) regarding evidence and operations of a SCS. Roughly half of the participants reported a neutral level of comfort with referring patients to a SCS (*n* = 68, 46.6%), and approximately one-third reported feeling uncomfortable (n=31, 21.2%), and very uncomfortable (n=13, 8.9%) doing so. ED RNs' experience and comfort level towards SUD and SCSs are presented in Table 2.

Table 2

Experience and Comfort Level of ED RNs Towards SUD and SCSs (*n* = 146)

Variable	*n*	%
Frequency of Caring for Patients Who Have a Known or Suspected SUD at Current Workplace		
Once per year	1	0.7
Once every 3-6 months	3	2.1
Once in two weeks to once per month	4	2.7
Once to a few times a week	27	18.5
Daily	111	76.0
Level of Personal Experience (Outside of Work) with People who have a Known or Suspected SUD		
No Experience	12	8.2
Low level	54	37.0
Average level	49	33.6
High level	25	17.1
Very high level (expert)	6	4.1
Level of Personal Experience (Outside of Work) with People who have a Known or Suspected SUD		
No Experience	12	8.2
Low level	54	37.0
Average level	49	33.6
High level	25	17.1
Very high level (expert)	6	4.1
Level of Comfort Interacting with People Who Have a Known or Suspected SUD		
Very Uncomfortable	2	1.4
Uncomfortable	9	6.2
Neutral	40	27.4

Comfortable	72	49.3
Very Comfortable	23	15.8
In the Past 6 Months, RNs Have Treated Adult Patients in the ED who (select all that apply):*		
I suspected or who admitted to using intravenous recreational drugs.	141	96.6
I suspect or who admitted to smoking drugs such as crack-cocaine or methamphetamine.	141	96.6
Presented with an abscess or other bacterial infection I suspected or knew to be related to injection drug use.	138	94.5
Presented with systemic infections (e.g., endocarditis, deep-vein thrombosis) I suspected or knew to be related to injection drug use.	128	87.7
Presented with another type of recreational drug overdose.	133	91.1
Presented with an opiate overdose.	136	93.2
Level of Experience Regarding Evidence and Operations of a SCS		
No experience	78	53.4
Low level	47	32.2
Average level	18	12.3
High Level	3	2.1
Level of Comfort with Referring Patients to a SCS		
Very Uncomfortable	13	8.9
Uncomfortable	31	21.2
Neutral	68	46.6
Comfortable	26	17.8
Very Comfortable	8	5.5

*Note. This is a select-all-that-apply question.

ED RNs' Views Towards Drug Use and SUDs

A series of Likert-scale questions were used to assess ED RNs' views towards drug use and SUDs. See Figure 2 for the Likert-Scale results. In summary, 82.2% (*n* = 120) of ED RNs strongly agreed that recovering from a SUD is difficult and the same number agreed or strongly agreed that individuals with SUD have usually experienced significant adverse life events. Approximately three-quarters (*n* = 114, 78.1%) of ED RNs strongly agreed that recovering from a SUD is a lifelong process. ED RNs agreed

other nurses and physicians equally understand the difficulty of recovering from a SUD (*n* = 71, 48.6%), while patients understand slightly less (*n* = 59, 40.4%). An overwhelming number of RNs agreed or strongly agreed that more work needs to be done to minimize the stigma related to SUD (*n* = 122, 83.6%,), that there are not enough community services to treat people who use and/or inject and use drugs (*n* = 125, 85.6%), and that access to available treatment options for individuals in need is currently a problem (*n* = 132, 90.41%). Approximately two-thirds (*n* = 95, 65.1%) of ED RNs strongly agreed that peer support can have a positive impact on the chances of recovery, and 64.4% (*n* = 94) agreed or strongly agreed that to recover, individuals suffering from SUD need to move to a new environment and drug use and addiction are a public health issue (*n* = 94, 64.4%). Only 17.1% (*n* = 25) of ED RNs agreed that drug addiction is a choice, and 42.8% (*n* = 64) agreed that healthcare providers treat individuals with SUD differently than other patients. In terms of the ED, approximately two-thirds (*n* = 102, 69.9%) of ED RNs strongly agreed that the ED is not an optimal location for people who use and/or inject drugs to come for non-medical (e.g., social issues), and about half (*n* = 77, 52.7%) of ED RNs agreed or strongly agreed that people who use and/or inject drugs sometimes come to their ED for services that could be adequately provided by SCSs. Lastly, roughly three-quarters *(n* = 109, 74.7%) of ED RNs agreed or strongly agreed that people who use and/or inject drugs mostly come to their ED for problems that are preventable, 80.8% (*n* = 118) agreed or strongly agreed that people who use and/or inject drugs often come to the ED with advanced conditions that could have been more easily controlled with earlier medical treatment, and 78.8% (*n* = 115) agreed or strongly agreed

that people who use and/or inject drugs place a heavy burden on their department by contributing to ED overcrowding.

A composite score was created to combine the above data into a single variable. The composite *Views Towards Drug Use and SUDs* score was normally distributed with a mean of 4.07 (SD = 0.35) and a range of 3.05 – 5.00. A mean of 4.07 indicates that there was mainly agreement among the ED RNs to the statements in Figure 2. Reliability of the combined items score was measured and found to have a Cronbach's alpha of 0.71 (see Table 3).

Figure 2

ED RNs' Views Towards Drug Use and SUDs Likert-Scale Questions

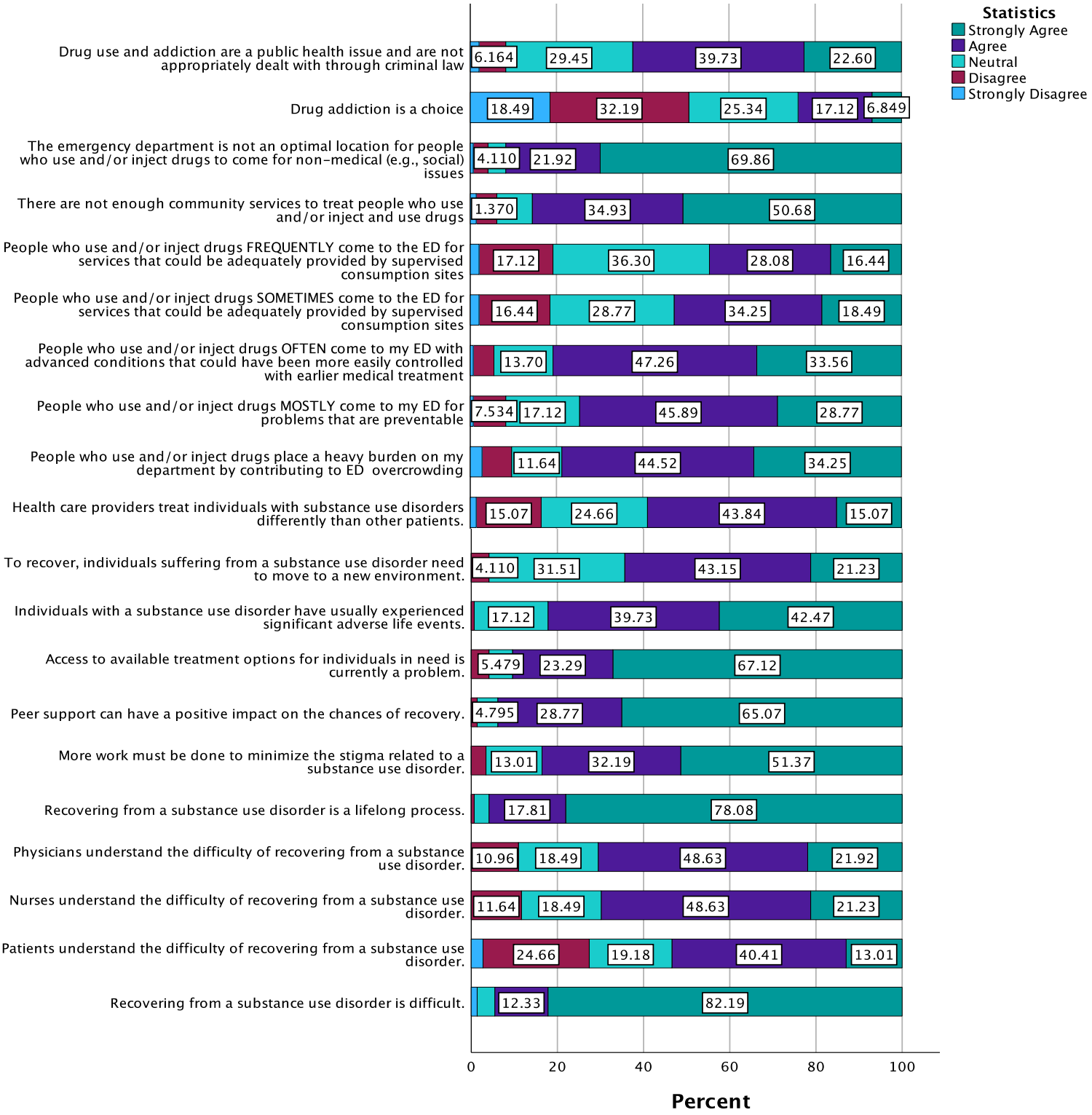


Table 3

ED RNs' Views Towards Drug Use and SUDs (*n* = 146)

	n	%	Minimum/ Maximum	Mean (SD)	Skew (SE)	Kurtosis (SE)
Composite Score	146	100	(3.05-5.00)	4.07 (0.35)	-0.26 (0.20)	0.01 (0.40)
Cronbach's Alpha				0.71		

Note. SD = Standard Deviation. SE = Standard Error.

ED RNs' Views Towards SCSs

A series of Likert-scale questions were used to assess ED RNs' views towards SCSs. See Figure 3 for the Likert-Scale results. In summary, ED RNs almost equally agreed (*n* = 47, 32.2%), and felt neutral (*n* = 49, 33.6%) that SCSs could create dangerous neighbourhoods. They also roughly equally agreed (*n* = 39, 26.7%) and felt neutral (*n* = 33, 22.6%) that SCSs promote drug use. Over half (*n* = 82, 56.2%) of ED RNs disagreed or strongly disagreed with being ethically opposed to SCSs and approximately half (*n* = 75, 51.4%) felt neutral on whether the evidence supported SCSs in improving the health outcomes of patients with recreational drug addiction. Despite these feelings, 74.7% (*n* = 109) of the ED RNs still agreed or strongly agreed that they would refer their patients who use and/or inject drugs to a SCS for additional harm reduction and addiction services, and 62.3% (*n* = 91) agreed or strongly agreed that they would support a SCS in their community.

A composite score was created to combine the above data into a single variable. The composite *Views Towards SCSs* score was normally distributed with a mean of 3.19 (SD = 0.48) and a range of 2.17 – 5.00. A mean of 3.19 indicates that there were both, agreement, and neutral feelings among the ED RNs to the statements in Figure 3. The

reliability of the combined items score was measured and found to have a Cronbach's alpha of 0.85 (see Table 4).

Figure 3

ED RNs' Views Towards SCSs Likert-Scale Questions

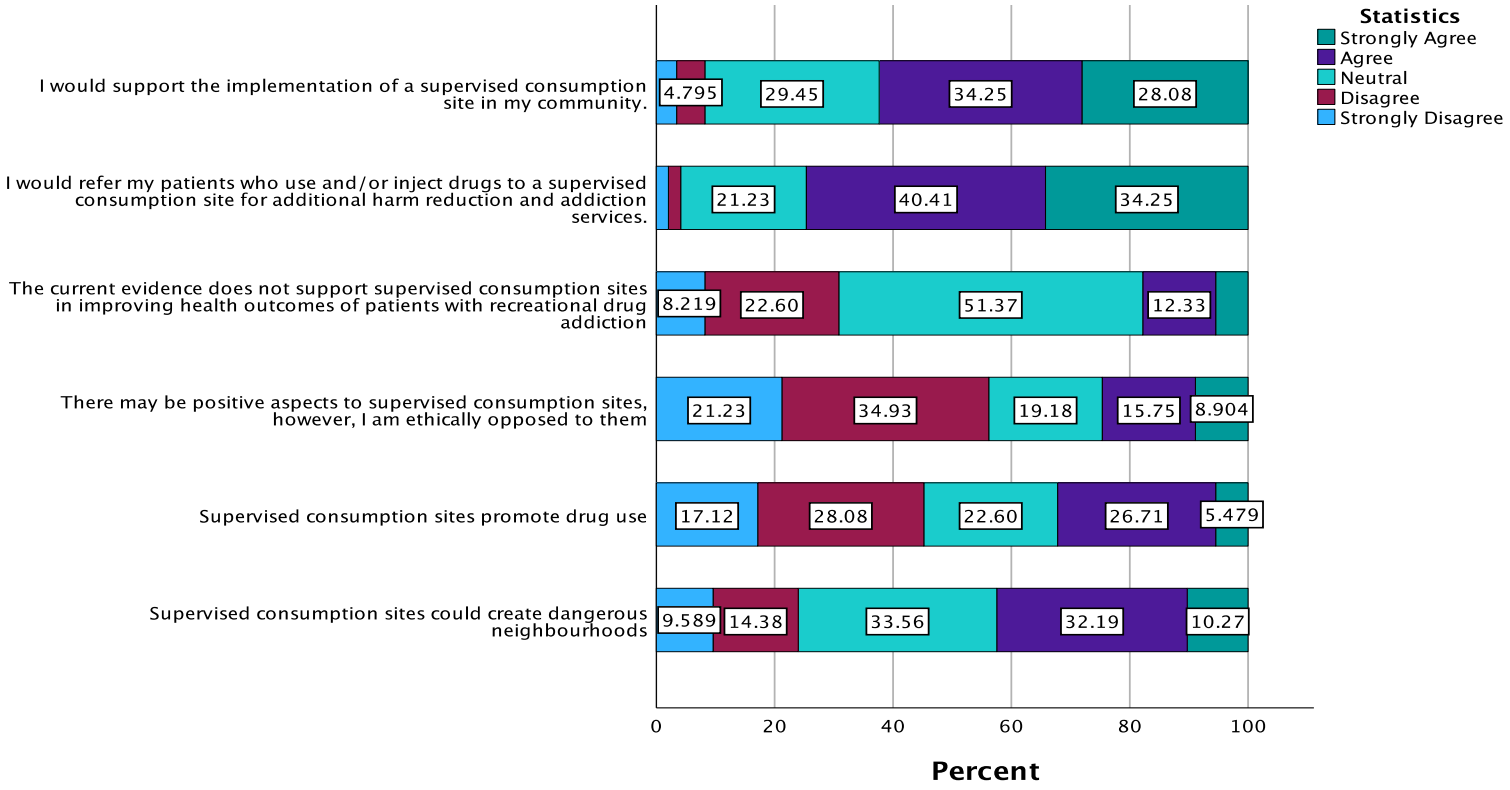


Table 4

ED RNs' Views Towards SCSs (n = 146)

	n	%	Minimum/ Maximum	Mean (SD)	Skew (SE)	Kurtosis (SE)
Composite Score	146	100	2.17-5.00	3.19 (0.48)	0.54 (0.20)	0.77 (0.40)
Cronbach's Alpha				0.85		

Impact of SCSs for PWUD, the ED, the Healthcare System, and the Community

A series of Likert-scale questions were used to assess the impact of SCSs for PWUD, the ED, the healthcare system, and the community. See Figure 4 for the Likert-Scale results. In summary, ED RNs agreed or strongly agreed that SCSs could impact PWUD by being beneficial to the health of people who use and/or inject drugs (*n* = 110, 75.4%), reducing the pressure to share drugs with others (*n* = 63 , 43.2%), enabling access to other supportive services (*n* = 117, 80.1%), helping people use more safely (*n* = 121, 82.9%), helping people get help with other health problems (*n* = 92, 63.0%), ensuring trained staff are ready to respond in case of overdose (*n* = 118, 80.8%), creating a safe place to use (*n* = 114, 78.1%), increasing links to care and support (*n* = 113, 77.4%), and reducing rates of HIV and hepatitis C among people who use and/or inject drugs (*n* = 116, 79.5%). ED RNs agreed or strongly agreed that SCSs could impact the ED by being beneficial to the operations of the ED (*n* = 98, 67.1%), reducing ED visits by preventing medical complications (e.g., abscess, systemic infections) through distribution of sterile needles (*n* = 97, 66.4%), decreasing ED wait times (*n* = 69, 47.3%), reducing the number of visits to the ED by providing non-medical services (e.g., addiction services and resources (access to social workers) (*n* = 116, 79.5%), and preventing some medical complications (*n* = 104, , 71.2%). They agreed or strongly agreed that SCSs could impact the healthcare system by decreasing EMS use for individuals who are found with decreased responsiveness in the community due to drug overdose (*n* = 112, 76.7%). Finally, ED RNs agreed or strongly agreed that SCSs could impact the community by reducing exposure to recreational drug use (*n* = 101, 69.2%)

and reducing drug-related paraphernalia discarded in public places (e.g., parks, streets) (*n* = 118, 80.8%).

A composite score was created to combine the above data into a single variable. The composite *Impact of SCSs for PWUDs, the ED, the Healthcare System, and the Community* score was normally distributed with a mean of 3.87 (SD = 0.67) and a range of 1.33 – 5.00. A mean of 3.87 indicates that there was mainly agreement among the ED RNs to the statements in Figure 4. Reliability of the combined items score was measured and found to have a Cronbach's alpha of 0.94 (see Table 5).

Figure 4

Impact of SCSs for PWUDs, on the ED, the Healthcare System, and the Community Likert-Scale Questions

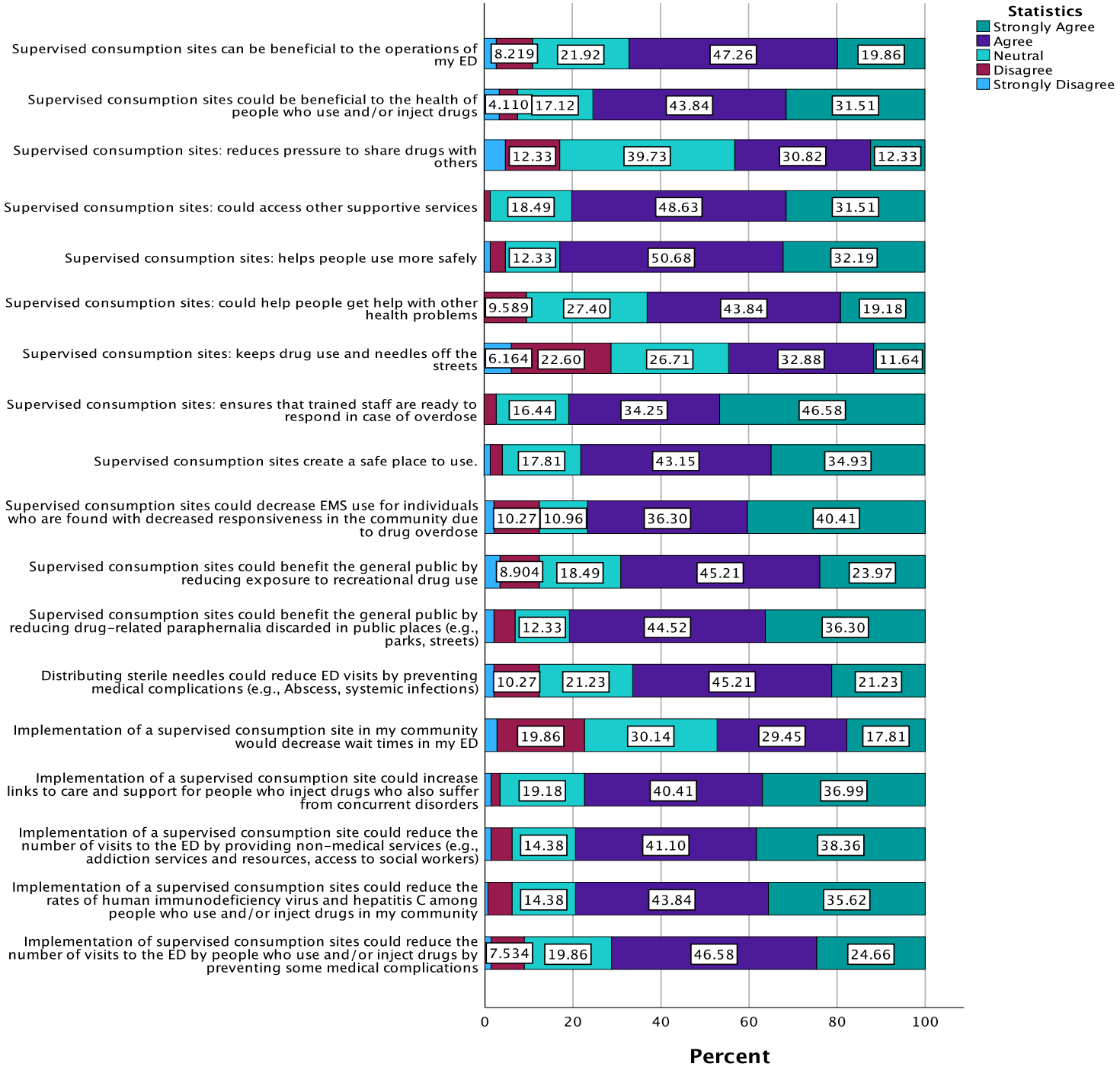


Table 5

Impact of SCSs for PWUDs, on the ED, the Healthcare System, and the Community (*n* = 146)

	n	%	Minimum/ Maximum	Mean (SD)	Skew (SE)	Kurtosis (SE)
Composite Score	146	100	1.33-5.00	3.87 (0.67)	-0.71 (0.20)	0.56 (0.40)
Cronbach's Alpha				0.94		

Services That ED RNs Identified SCSs Should Offer Within Them

The top five harm reduction services that ED RNs identified SCS should offer within them are 1) needle exchange program/distribution of new drug supplies (e.g., syringes, needles, sterile water, filters) (*n* = 122, 83.6%), 2) addiction counsellors (*n* = 121, 82.9%), 3) trained RNs for health care (e.g., wound/abscess care) (*n* = 115, 78.8), and 4) naloxone/Narcan kits (*n* = 113, 77.4%) and 5) Mental Health Professionals (e.g., social workers, psychologists) (*n* = 111, 76%). Conversely, the top five least chosen options were 1) close proximity to a hospital/healthcare centre (*n* = 8, 5.5%), 2) close proximity to the city's downtown (*n* = 10, 6.8%), 3) culturally appropriate services for Indigenous people (e.g., Indigenous service providers) (*n* = 13, 8.9%), 4) a women's only area (*n* = 21, 14.4%), and 5) HIV and hepatitis point of care testing (*n* = 25, 17.1%) (see Table 6).

Table 6

Services That ED RNs Identified SCS Should Offer Within Them (*n* = 146)*

Variable	*n*	%	Top 5
Needle exchange program/distribution of new drug supplies (e.g., syringes, needles, sterile water, filters)	122	83.6	1

Addiction Counsellors	121	82.9	2
Trained RNs for health care (e.g., wound/abscess care)	115	78.8	3
Naloxone/Narcan Kits	113	77.4	4
Mental Health Professionals (e.g., social workers, psychologists)	111	76.0	5
Referrals to withdrawal/addiction treatment centres	100	68.5	
Drug Checking Services (detects the contents of drugs to help people who use drugs make more informed decisions about their consumption)	76	52.1	
Access to methadone or other opioids such as suboxone if prescribed by a doctor	48	32.9	
Trained RNs for safe drug use teaching	42	28.8	
Trained medical doctors on site	42	28.8	
Peer-support programmes	35	24.0	
HIV and hepatitis point of care testing	25	17.1	
A women's only area	21	14.4	
Culturally appropriate services for Indigenous people (e.g., Indigenous service providers)	13	8.9	
Close proximity to city's downtown	10	6.8	
Close proximity to a hospital/healthcare centre	8	5.5	

*Note. This is a select-all-that-apply question and each participant selected their top seven options.

Services That ED RNs Identified Their EDs Should Offer

The top five services that ED RNs identified to be offered in their ED are 1) referrals to withdrawal/addiction treatment centres (*n* = 121, 82.9%), 2) mental health professionals (e.g., social workers, psychologists) (*n* = 116, 79.5%), 3) naloxone/Narcan

kits (*n* = 104, 71.2%), 4) trained RNs for drug-related wound/abscess care (*n* = 96, 65.8%) and 5) addiction counsellors (*n* = 86, 61.0%). Conversely, the most infrequently selected services were 1) drug checking services (*n* = 17, 11.6%), 2) needle exchange program/distribution of new drug supplies (e.g., syringes, needles, sterile water, filters) (*n* = 20, 13.7%), 3) access to methadone or other opioids such as suboxone if prescribed by a doctor (*n* = 37, 25.3%), 4) peer-support programmes (*n* = 40, 27.4%), and 5) trained RNs for safe drug use teaching (*n* = 41, 28.1%) (see Table 7).

Table 7

Services That ED RNs Identified Their EDs Should Offer (*n* = 146)*

Variable	*n*	%	Top 5
Referrals to withdrawal/addiction treatment centres	121	82.9	1
Mental Health Professionals (e.g., social workers, psychologists)	116	79.5	2
Naloxone/Narcan Kits	104	71.2	3
Trained RNs for health care (e.g., wound/abscess care)	96	65.8	4
Addiction Counsellors	86	61.0	5
Culturally appropriate services for Indigenous people (e.g., Indigenous service providers)	61	41.8	
HIV and hepatitis point of care testing	46	31.5	
Trained RNs for safe drug use teaching	41	28.1	
Peer-support programmes	40	27.4	
Access to methadone or other opioids such as suboxone if prescribed by a doctor	37	25.3	

Needle exchange program/distribution of new drug supplies (e.g., syringes, needles, sterile water, filters)	20	13.7
Drug Checking Services (detects the contents of drugs to help people who use drugs make more informed decisions about their consumption)	17	11.6

*Note. This is a select-all-that-apply question and each participant selected their top seven options.

In summary, there were 146 (42.8%) respondents who met the inclusion criteria and were included in the analyses. Most were 40 years and younger, female, white, and were experienced nurses who had received harm reduction training and education. Participants reported experience and comfort with people who have known or suspected SUD but lacked knowledge, comfort, and experience with SCSs. Composite scores for their views toward drug use and SUDs, SCSs, and the impact of SCSs for PWUD on the ED, the healthcare system and the community were calculated. All scores were found to be normally distributed and had a Cronbach's alpha ≥ 0.7. Lastly, the top services that SCSs and EDs should offer within them were identified. The presence and availability of addiction counsellors, trained RNs for healthcare, naloxone/Narcan kits, and mental health professionals were highly ranked for both locations.

CHAPTER 5

DISCUSSION

This quantitative study aimed to produce descriptive findings that explored ED RNs' level of experience with people who have suspected or known SUD, their views toward SUD and SCSs, and the impact of SCSs on PWUD, the ED, the healthcare system, and the community. It also explored the services that ED RNs identify SCSs and their EDs should offer. The findings from this study not only provided recent data on ED RNs' perceptions of SUD and SCSs, but also added to the developing literature on perceptions of RNs in small to mid-sized Canadian cities, thus, filling gaps in the literature. To the researcher's knowledge, this study is the first to report the perceptions of ED RNs towards SUD and SCSs together. It is also the first to identify services that SCSs and their EDs should offer from an ED RN perception. This study had a response rate of 50.1% (n = 171) which is similar to existing literature (Arabaci, 2016; Chu & Galang, 2013; Kelleher & Cotter, 2009). However, the sample size in this study (n = 146) was larger than the previous studies (Arabaci, 2016; Chu & Galang, 2013; Kelleher & Cotter, 2009).

This study demonstrated that the Harm Reduction Model (see Figure 1) (Cheung, 2000) is a valuable model that aligns with the goals of harm reduction and is important in assessing RNs' perceptions of SUDs and SCSs. Additionally, the model's conceptual level directly relates to this study's focus of "value-neutral views" of drug use and users, does not insist on abstinence, and encourages active participation of the user to access harm reduction programs such as SCSs.

Comparison with Existing Literature

Demographics

Results from the survey demonstrated that most RNs were 40 years old or younger (n = 100, 68.5%), self-identified as female (n = 118, 80.8%), and white (n = 132, 90.4%). The Canadian RN average age in 2021 was between 43-44 years old with 91% of nurses identifying as female (CNA, 2023). Additionally, there continues to be a disproportionate Caucasian nursing workforce in Canada (Jefferies et al., 2021). According to Smiley et al. (2023), the RN workforce is 80% white/Caucasian. This indicates that our sample is younger than the national RN average, but affirms that ED nursing is a mostly Caucasian, female-dominated profession.

ED RNs' Experience and Comfort Level with SUDs and SCSs

Most of the RNs had over five years of nursing experience (72.1%), received harm reduction training or education (96.3%), cared daily for patients with known or suspected SUD (76.0%), and felt comfortable or very comfortable interacting with people with a known or suspected SUD (65.1%). Despite this foundation, their knowledge and comfort levels toward SCSs remained modest. Most of the ED RNs reported a low or moderate level of knowledge regarding the evidence and operations of a SCS, reported no experience or low level of experience regarding the evidence and operations of a SCS, and reported feeling mostly neutral regarding their level of comfort with referring patients to a SCS, with a higher number of RNs feeling slightly more uncomfortable than comfortable doing so.

Similarly, Ray et al. (2013) stated that providers self-reported feeling high levels of comfort with SUDs. Additional studies reported that nurses had adequate levels of knowledge on substance use (Happell et al., 2002; Kelleher & Cotter, 2009). The

majority of nursing students also reported having good knowledge of substance abuse (Ferndendes et al., 2022), and stated that their school emphasized learning about SUDs (Barenie et al., 2023). However, no comparative literature could be identified regarding nurses' experience or comfort level with SCSs. Kelleher and Cotter (2009) identified that there is a knowledge deficit in relation to intervention strategies and therefore may suggest that PWUD are inadequately managed. Nurses are essential to the safe and effective delivery of SCSs (RNAO, 2018); thus, they need to be knowledgeable and comfortable with the evidence for and operation of the sites.

RNs' Views Toward SUD

Results from the composite score that assessed ED RNs' views toward drug use and substance use disorders demonstrated that ED RNs had an allyship and understanding toward drug use and SUD and there was strong overall agreement with the statements provided (mean = 4.07). The nurses in the study agreed that drug addiction is not a choice, recovering from a SUD is difficult, and recovering can be a lifelong process. They believed that to recover, people with SUD need to move to a new environment. They also agreed that more work needs to be done to minimize the stigma related to a SUD, peer support can have a positive impact on the chances of recovery, access to treatment is currently a problem, people with SUD usually experience significant life events, and that there are not enough community services to treat PWUD. Conversely, when Shreffler et al. (2021) explored these statements with patients, nurses, medical students, and physicians, they noted that nurses had the least amount of agreement to the statements in comparison to the other disciplines studied.

When considering the effect of SUDs on the ED, participants agreed that PWUD contribute to ED overcrowding and that they frequent the ED for problems that could be prevented or present with advanced conditions that could have been better controlled with earlier medical treatment. The ED RNs also agreed that PWUD sometimes or frequently come to the ED for services that SCSs could adequately provide, and that the ED is not an optimal location for PWUD to come for non-medical (e.g., social) issues. Similarly, Katz et al. (2017) found that some ED physicians felt that PWUD placed a heavy burden on their department by contributing to ED overcrowding, but few physicians felt that PWUD overly frequented their ED. However, most ED physicians agreed with ED RNs that PWUD sometimes present to the ED for services that could be adequately provided by SCSs (Katz et al., 2017).

The literature indicates that nurses have negative attitudes toward people who have SUDs (Arabaci, 2016; Chu & Galang, 2013; Howard & Chung, 2000; van Boekel et al., 2013). Howard and Chung (2000) found that older nurses hold more disciplinary and authoritarian stances towards PWUD, are more supportive of mandatory treatment, and are less accepting of personal and societal drug use, while younger and more highly-educated nurses had more favourable views toward PWUD. This study yielded similar results to Howard and Chung (2000)'s finding that younger and more educated nurses have more favourable views as this study's sample of RNs was primarily younger than 40 years, most received harm reduction education, and they were relatively understanding toward people with SUDs.

RNs' Views Towards SCSs

Results from the composite score that assessed ED RNs' views toward SCSs demonstrated more reserved or neutral views toward SCSs (mean = 3.19). This sample of ED RNs' felt overall neutral about whether SCSs could create dangerous neighbourhoods or promote drug use, were ethically opposed to them, and that the current evidence does not support SCSs in improving the health outcomes of patients with recreational drug addiction. Similarly, the nurses in the study by Jackson et al. (2021) were also less supportive of harm reduction modalities such as SCSs and key informants expressed potential opposition to SCSs due to linking SCSs with criminalized activity and thus bringing danger into the community. Likewise, stakeholders were concerned that SCS implementation would further degrade the safety and cleanliness of their community (Wegner et al., 2011). However, other literature demonstrated that SCSs can decrease crime, therefore creating safer neighbourhoods (Myer & Belisle, 2018), and improved health outcomes through decreased opioid-related overdoses and deaths (Behrends et al., 2019; Hayashi et al., 2021; Irvine et al., 2019; Kerr et al., 2007; Marshall et al., 2007; Milloy et al., 2008; Notta et al., 2019), and decreased bloodborne infections such as HIV and hepatitis C infections (Bayoumi & Zaric, 2008; Enns et al., 2016; Government of Canada, 2021b; Irwin et al., 2017).

Although ED RNs in this study conveyed some hesitation toward SCSs, more RNs than not expressed that they support the implementation of a SCS in their community and would refer their patients who use drugs to SCSs for additional harm reduction and addiction services. However, Katz et al. (2017) found that ED physicians were less reluctant than nurses toward SCSs and largely supported their implementation and use in Canada. Like this study, physicians who did not necessarily support the

implementation of SCSs in their communities would still refer their patients from the ED to SCSs (Katz et al., 2017). This finding is relevant because harm reduction strategies such as SCSs have lacked global support in the past (Global State of Harm Reduction, 2018; Harm Reduction International, 2020). Additionally, as PWUD are among those who are most likely to leave hospitals "against medical advice" (McNeil et al., 2014), going to a SCS may provide them with more appropriate services that better serve their needs, and in turn decrease the need for ED visits.

Impact of SCSs for PWUD, the ED, the Healthcare System, and the Community

Results of the third composite score that assessed the impact of SCSs for PWUD, and on the ED, the healthcare system, and the community displayed an overall positive impact (mean = 3.87). The RNs in this study agreed that the implementation of a SCSs could benefit PWUD by reducing the rate of HIV and hepatitis C, increasing links and access to care and support, creating a safe place to use, and helping people use more safely. The respondents also agreed that SCSs can also ensure that trained staff are ready to respond in case of an overdose, can help PWUD get treatment for other health problems, and reduce the pressure to share drugs with others. They also agreed that the implementation of SCSs can positively impact the ED by reducing the number of visits to the ED, providing non-medical services (e.g., addiction services and resources, access to social workers), decreasing ED wait times, and preventing medical complications (e.g., abscess, systemic infections). Additionally, they agreed that SCSs can positively impact the healthcare system by decreasing the use of emergency medical services for individuals who are found with decreased responsiveness in the community due to drug overdose. Finally, ED RNs agreed that SCSs can positively impact the community by

reducing drug-related paraphernalia discarded in public places, reducing exposure to recreational drug use, and keeping drug use and needles off the streets. Several studies in the literature reiterated these benefits: SCSs provide access to health care providers and support staff that can prevent and respond to medical emergencies (Government of Canada, 2021b), can offer a safe place to use drugs (Lange & Bach-Mortesen, 2019), decrease hospital and emergency medical services use (Government of Canada, 2021b; Madah-Amiri et al., 2019), reduce risk of accidental overdose due to less rushed injections and injecting drugs alone (Government of Canada, 2021b; Hayashi et al., 2021; Kerr et al., 2007; Notta et al., 2019; Pauly et al., 2020), decrease reusing and sharing of needles, and thus reduce HIV and hepatitis C infections (Bayoumi & Zaric, 2008; Enns et al., 2016; Government of Canada, 2021b; Irwin et al., 2017), and last but not least, increase access to social services and treatments (Bayoumi & Zaric, 2008; Government of Canada, 2021b; Irwin et al., 2017; Wood et al., 2007).

Top Services Identified by ED RNs to be Offered in SCSs and ED

In this study, the top services that ED RNs identified SCSs should offer within them were needle exchange programs/distribution of new drug supplies, addiction counsellors, trained RNs for health care, naloxone/Narcan kits, and mental health professionals. The participants identified that their EDs should offer referrals to withdrawal/addiction treatment centres, mental health professionals, naloxone/Narcan kits, and trained RNs for drug-related wound/abscess care. Kenney et al. (2021) reported that PWUD would most likely access a SCS if it provided safety from police, entry into withdrawal management, drug checking services, and if they could obtain new needles. Olding et al. (2020) conveyed that drug checking and having peer staff present were

important services to PWUD. For PWUD, the presence of healthcare staff at SCSs for the provision of emergency treatments was valued (Kerr et al., 2007). In terms of harm reduction services offered in the ED, patients reported that they would desire naloxone prescribing (Lowenstein et al., 2022). Emergency department RNs and PWUD both identified withdrawal management and access to new needles (Kenney et al., 2021), the presence of healthcare staff (Kerr et al., 2007), and naloxone accessibility (Lowenstein et al., 2022) as preferred services. In the literature, PWUD valued safety from the police (Kenney et al., 2021) and drug-checking services (Kenney et al., 2021; Olding et al., 2020), but the ED RNs in this study did not prioritize these services as essential for SCSs or within their EDs.

Implications for Education, Practice and Policy

Provider perceptions could impact the willingness to develop positive relationships with patients (Shreffler, 2021). As RNs are on the front lines of patient care, they hold a crucial role in caring for patients with SUDs, and therefore, they must be well-prepared to take on this responsibility (Smothers et al., 2018). They also need to be skillful and capable of providing support and services to PWUD (RNAO, 2018). Of note, the RNAO (2018) provided practice, education, and organization and system policy recommendations for nurses to exercise when caring for patients with SUDs.

Education

The results from this study demonstrated that RNs reported low or moderate levels of knowledge regarding evidence and operations of a SCS. They believed that the current evidence does not support SCSs in improving the health outcomes of patients with recreational drug addiction. This information is valued in informing RN curricula to

ensure students are provided with harm-reduction education that includes the evidence and operations of SCSs. Education should also include information on how to care for patients with known or suspected SUDs. Designing educational programs with various teaching methods and strategies is also important for healthcare workers to increase their knowledge, skill, and confidence and thus improve the attitudes required to provide care to PWUD (RNAO, 2018). Moreover, including people with lived experience and other experts in delivering this education can help provide high-quality care (RNAO, 2018). The structure and format of these programs should also be considered to ensure the most ideal circumstances are offered in terms of the location of the training, resources needed, frequency and length of training, and method of delivery (RNAO, 2018).

Nursing programs must become more aware of nursing needs towards caring for patients with SUDs to better incorporate the appropriate education, knowledge, tools, and skills in their curricula to ensure nursing students are well-equipped to enter clinical practice (Smothers et al., 2018). To acknowledge the possible administrative challenges of changing a curriculum, incorporating an already established curricular workshop would be an easy and quick integration to meet the same goals (Smothers et al., 2018). Educational requirements regarding harm reduction in RN programs should also be standardized at a national level.

Practice

The participants in this study reported no experience or low experience regarding evidence and operations of a SCS. They also agreed that healthcare providers treat individuals with SUD differently than other patients. Horner et al. (2019) found that insufficient and outdated training magnified nurses' challenges when faced to care for a

patient with a SUD. Nurses are willing to learn and develop skills needed to appropriately care for patients with SUDs but are lacking purpose and direction (Horner et al., 2019). Nurses have also expressed the importance of having safe and suitable places to refer patients with SUD after discharge from the hospital (Horner et al., 2019). Thus, standardized protocols are needed to facilitate the transition between hospital and community (Horner et al., 2019). Practicing the recommendations set out by the RNAO (2018) may help combat these challenges.

According to the RNAO (2018), to support engagement, nurses must develop trusting, respectful, and non-judgmental relationships at every encounter with PWUD. They should practice reflectively to recognize and acknowledge health inequities that resulted from previous trauma, marginalization, and stigma, and they should encourage shared decision-making with PWUD to reduce discrimination and stigma (RNAO, 2018). Implementing harm reduction services in hospitals is also a crucial component of evidence-informed addiction care and it honours and respects PWUD where they are currently in their journey (Perera et al., 2022). Additionally, a standardized ED approach for integrating drug use into clinical practice and referral facilitation through community partnerships is essential to create an efficient pathway for engagement in SCS services and to reduce morbidity and mortality caused by drug use (Macias-Konstantopoulous et al., 2021). Additionally, education should also be included in hospital orientations, with frequent offerings of continuation education opportunities on SUDs and harm reduction strategies such as SCSs. The newest literature should also be presented to ensure RNs are always practicing up to date with research.

Organization and System Policy

Emergency department RNs stated that access to treatment is a problem and that there are insufficient community services to treat PWUD. They also reported that peer support can positively impact the chances of recovery. The organization and system policy recommendation set out by RNAO (2018) includes involving peer workers in the programming of supervised consumption services by increasing access to the peer staff as resources for PWUD and including them in decision-making processes. RNAO (2018) proposes integrating comprehensive services to SCSs to ensure PWUD have access to health and social services and embedding harm reduction programs into health and social settings to minimize adverse health outcomes. To mitigate potential barriers, continued operational improvements and structural redesigns, as well as aligning the facilities' location, physical space, and operation hours to the needs of those that will use them (RNAO, 2018). Advocating for legislation and regulation to support ethical policies and procedures that increase the use and access to supervised consumption services could also be advantageous (RNAO, 2018).

Developing a policy requiring universal substance use assessments for all patients on admission to the ED would also standardize patient care. Implementing processes for monitoring substance use and abuse by a provincial RN regulatory body could also contribute to addressing the drug epidemic. Lastly, changes to current drug policies are also needed to help people see the worth of SCSs (Jackson et al., 2021).

This study identified areas for improvement in the practice, education, and organizational and system policies of ED RNs. Implementing these recommendations can ensure nurses practice more comfortably, knowledgeably, competently, and consistently for patients with known or suspected SUDs.

Future Research

Though the majority of ED RNs stated that they would refer their patients to SCSs, a future study would be beneficial to display patterns of referral. Referring a patient to a SCS would require a change in practice, and perceptions may not always translate into behaviour. Additionally, future research is needed once a referral process is established to assess if there is follow-through.

The participants in this study reported feeling a primarily neutral level of comfort with referring patients to a SCS. Future studies can focus on implementing interventions that aim at increasing their comfort level and reassessing their comfort. Exploring RN comfort and knowledge across other clinical practice settings to determine if comfort and knowledge of RNs change with the setting would also be beneficial.

Given that RNs expressed no experience or low level of experience regarding the evidence and operations of a SCS, and despite most daily caring for patients with a known or suspected SUD, repeating this study in larger cities and where SCSs are established may yield different results. This study also identified services that ED RNs felt that SCSs and their EDs should offer. Future research with other disciplines would be beneficial for comparison and valuable when there are plans for opening a new SCS or improving an existing site. Lastly, because this study population primarily identified as female and white, future work could examine perceptions across other genders, races/ethnicities, and from those who received training and education in other geographic locations where SCSs are present or more well-known to participants.

Limitations

This study has some limitations. The survey was deployed electronically (via

email invitation). Due to this fact, it may be subject to self-selection and self-reporting bias (Eysenbach & Wyatt, 2002). Participants are more likely to respond to a questionnaire if they see topics that are of interest to them, are affected by it, or are attracted to the incentive being offered for completion (Eysenbach & Wyatt, 2002). This survey relied on self-reporting of data by the participants as well, which is subject to biases such as social desirability, question interpretation, and respondents' ability to evaluate themselves accurately (Salters-Pedneault, 2020). Moreover, potential participants may not have completed the survey due to not opening or receiving the email invitation, not knowing how to scan the QR code provided on the recruitment poster, forgetting to complete the survey, or ignoring it due to survey fatigue or indifference. This study was completed in Southwestern Ontario and findings may not represent ED RNs in Ontario or Canada. Additionally, this study only used one method of data collection (online surveys), which may have limited the potential to understand ED RNs' perceptions fully. Moreover, purposeful sampling of only ED RNs of Southwestern Ontario hospitals who consented to research can result in sampling bias because the group is not randomly selected and may not reflect the population of interest. Lastly, most participants identified as female, white, and trained within Ontario and thus may not represent ED RNs in Ontario or Canada.

Conclusion

Findings from this quantitative study highlighted the research gap of providing ED RNs' perceptions of SUD and SCSs for small to mid-sized Canadian cities. It also contributes to the body of literature by offering recent data and providing the viewpoints of RNs, the most abundant healthcare team members. By recognizing their perceptions,

providers can work towards ensuring these do not affect the quality of care they provide (Shreffler, 2021). Results from this study can serve as an opportunity to compare perceptions from other disciplines, share new knowledge, and improve patient care and safety. The findings can also improve RN practice, promote curricula changes to include education on SUD, caring for PWUD, and harm reduction strategies such as SCSs, and help encourage policy creation to standardize care better. The results from this study can assist city and government officials in deciding which services to include in the next SCS and hospital administrators in determining which harm reduction services are most valued by ED RNs and which to implement within the ED.

There is an overall increase in implementation and commitment to harm reduction strategies in Canada and globally (Harm Reduction International, 2022). This result is due to the dedication, resilience, and strength of community members and international organizations that have continued to advocate for health and human rights despite many challenges faced along the way (Harm Reduction International, 2022). Research contributing to nursing practice and patient safety benefits the profession, society, and existing literature.

REFERENCES/BIBLIOGRAPHY

Academic Invest. (n.d.). *How to become an emergency room nurse.* https://www.academicinvest.com/science-careers/nursing-careers/how-to-become-an-emergency-room-nurse

Age-friendly Sarnia-Lambton. (n.d.). *Alcohol and drug addiction assessment and treatment.* https://agefriendlysarnialambton.ca/Services/List/10095/Alcohol_and_Drug_Addiction_Assessment_and_Treatment

Arabaci, L. B. (2016). Perceptions and attitudes of nurses working at emergency unit about the causes and treatment of addiction. *Journal of Psychiatric Nursing, 7*(3),105-113. https://doi.org/h8nt

Barenie, R. E., Cernasev, A., Heidel, R. E., Stewart, S., & Hohmeier, K. (2023). Faculty, staff, and student perceptions of substance use disorder stigma in health profession training programs: A quantitative study. *Substance Abuse Treatment, Prevention, and Policy, 18*(2). https://doi.org/kngn

Bayoumi, A. M., & Zaric, G. S. (2008). The cost-effectiveness of Vancouver's supervised injection facility. *Canadian Medical Association Journal, 179*(11), 1143–1151. https://www.cmaj.ca/content/179/11/1143

Behrends, C. N., Paone, D., Nolan, M. L., Tuazon, E., Murphy, S. M., Kapadia, S. N., Jeng, P. J., Bayoumi, A. M., Kunins, H. V., & Schackman, B. R. (2019). Estimated impact of supervised injection facilities on overdose fatalities and healthcare costs in New York City. *Journal of Substance Abuse Treatment, 106*, 79-88. https://doi.org/gmx3r5

Biancarelli, D. L., Biello, K. B., Childs, E., Drainoni, M., Salhaney, P., Edeza, A., Mimiaga, M. J., Saitz R., & Bazzi, A. R. (2019). Strategies used by people who inject drugs to avoid stigma in healthcare settings. *Drug and Alcohol Dependence*, *198*, 80-86. https://doi.org/ghkxft

Canadian Centre on Substance Use and Addiction. (2020). *Impacts of the COVID-19 pandemic on people who use substances: What we heard.* https://www.ccsa.ca/impacts-covid-19-pandemic-people-who-use-substances-what-we-heard

Canadian Centre on Substance Use and Addiction. (2023). *Opioids.* https://www.ccsa.ca/opioids#:~:text=Canada%20is%20experiencing%20a%20drug,involved%20stimulants%20or%20other%20substances.

Canadian Institute of Health Information. (2021). *Registered nurses.* https://www.cihi.ca/en/registered-nurses

Canadian Nurses Association. (2023). *Nursing statistics.* https://www.cna-aiic.ca/en/nursing/regulated-nursing-in-canada/nursing-statistics

Centre for Addiction and Mental Health. (2018, October 1). *What are the core elements of peer support programs?* https://kmb.camh.ca/api/assets/4113015f-571e-4281-8b11-399882117cc0

Cheung, Y. W. (2000). Substance abuse and developments in harm reduction. *CMAJ, 162*(12). 1697-1700. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1232508/pdf/cmaj_162_12_1697.pdf

Chu, C. & Galang, A. (2013, June 1). *Hospital nurses' attitudes toward patients with a history of illicit drug use*. Canadian nurse. https://www.canadian-nurse.com/blogs/cn-content/2013/06/01/hospital-nurses-attitudes-toward-patients-with-a-h

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). Internet, phone, mail, and mixed-mode surveys: The tailored design method (4th ed.). Hoboken, NJ: John Wiley & Sons

Enns, E. A., Zaric, G. S., Strike, C. J., Jairam, J. A., Kolla, G., & Bayoumi, A. M. (2016). Potential cost-effectiveness of supervised injection facilities in Toronto and Ottawa, Canada. *Addiction,111*(3), 475–489. https://doi.org/hsmb

Erie St. Clair Health Line. (2022). *Alcohol and drug addiction assessment and treatment Chatham – Kent.* https://www.eriestclairhealthline.ca/listServicesDetailed.aspx?id=10095&region=ChathamKent

European Monitoring Centre for Drugs and Drug Addiction. (2018). *Perspective on drugs drug consumption rooms: An overview of provision and evidence.* https://www.emcdda.europa.eu/system/files/publications/2734/POD_Drug%20consumption%20rooms.pdf

Eysenbach, G., & Wyatt, J. (2002). Using the internet for surveys and health research. *Journal of Medical Internet Research*, *4*(2). https://doi.org/fhdhwj

Fernandes, A., Mustakim, M., Het, P., Krunali, P., & Khyati, P. (2022). Substance abuse: Knowledge and attitudes of nursing students. *Journal of Positive School*

Psychology, 6(8). 723-727. https://journalppw.com/index.php/jpsp/article/view/9807/6399

Gaume J., Schmutz E., Daeppen J. B., & Zobel., F. (2021). Evolution of the illegal substances market and substance user's social situation and health during the COVID-19 pandemic. *International Journal of Environmental Research and Public Health, 18*(9),1-16. https://doi.org/gmbzw7

Global State of Harm Reduction. (2018). *Global overview.* https://www.hri.global/files/2018/12/10/GlobalOverview-harm-reduction.pdf

Global State of Harm Reduction. (2020). *1.1 Executive Summary.* https://www.hri.global/files/2020/10/26/Global_State_HRI_2020_1_1_Global_Overview_FA_p16-17.pdf

Government of Canada. (2021a, July 20). Opioids and the opioid crisis – get the facts. https://www.canada.ca/en/health-canada/services/opioids/get-the-facts.html#a1

Government of Canada. (2021b, July 22). Supervised consumption sites and services: Explained. https://www.canada.ca/en/health-canada/services/substance-use/supervised-consumption-sites/explained.html

Government of Canada. (2022a, June 23). *Opioid- and stimulant-related harms in Canada.* https://health-infobase.canada.ca/substance-related-harms/opioids-stimulants/

Government of Canada. (2022b, June 30). Federal actions on opioids to date. https://www.canada.ca/en/health-canada/services/opioids/federal-actions/overview.html

Government of Canada. (2022c, August 11). *Interactive map: Canada's response to the opioid overdose crisis*. https://health.canada.ca/en/health-canada/services/drugs-medication/opioids/responding-canada-opioid-crisis/map.html

Hamilton Health Sciences. (2020, August 31). *How to use a naloxone kit.* https://www.hamiltonhealthsciences.ca/share/how-to-use-a-naloxone kit/#:~:text=Naloxone%20kits%20are%20portable%20pouches,time%20to%20access%20emergency%20services

Happell, B., Carta, B., & Pinikahana, J. (2002). Nurses' knowledge, attitudes and beliefs regarding substance use: A questionnaire survey. *Nursing & Health Sciences*, *4*(4), 193–200. https://doi.org/cpxv5z

Harm Reduction International. (2020). *Global state of harm reduction 2020 7th edition.* https://www.hri.global/files/2021/03/04/Global_State_HRI_2020_BOOK_FA_Web.pdf

Harm Reduction International. (2021). *Global state of harm reduction – 2021 update.* https://www.hri.global/global-state-of-harm-reduction-2021

Harm Reduction International. (2022). *Global state of harm reduction 2022.* https://hri.global/wp-content/uploads/2022/11/HRI_GSHR-2022_Full-Report_Final-1.pdf

Harris, R. E., Richardson, J., Frasso, R., & Anderson, E. D. (2018). Perceptions about supervised injection facilities among people who inject drugs in Philadelphia. *International Journal of Drug Policy*, *52*, 56-61. https://doi.org/gc6hx8

Hawk, K., & D'Onofrio, G. (2018). Emergency department screening and interventions for substance use disorders. *Addiction Science & Clinical Practice, 13*, 1-6. https://doi.org/gkzgc2

Hayashi, K., Wood, E., Dong, H., Buxton, J. A., Fairbairn, N., DeBeck, K., Milloy, M. J., & Kerr, T. (2021). Awareness of fentanyl exposure and the associated overdose risks among people who inject drugs in a Canadian setting. *Drug and Alcohol Review, 40*(6), 964–973. https://doi.org/hsmc

Holton, E. F., & Burnett, M. F. (2005). The basics of quantitative research. In R. A. Swanson & B. L. Swanson (Eds.). *Research in organizations: Foundations and methods of inquiry* (pp. 29-44). Berrett-Koehler Publishers, Inc.

Horner, G., Daddona, J., Burke, D. J., Cullinane, J., Skeer, M., & Wurcel, A. G. (2019). "You're kind of at war with yourself as a nurse": Perspectives of inpatient nurses on treating people who present with a comorbid opioid use disorder. *Plos One, 25*(10), 1-16. https://doi.org/ggh5kd

Howard, M. O., & Chung, S. S. (2000). Nurses' attitudes toward substance misusers. II. Experiments and studies comparing nurses to other groups. *Substance Use & Misuse, 35*(4), 503-532. https://doi.org/dtkr6r

Hyshka, E., Anderson-Baron, J., Pugh, A., Belle-Isle, L., Hathaway, A., Pauly, B., Strike, C., Asbridge, M., Dell, C., McBride, K., Tupper, K., & Wild, T. C. (2019). Principles, practice, and policy vacuums: Policy actor views on provincial/territorial harm reduction policy in Canada. *The International Journal on Drug Policy*, *71*, 142–149. https://doi.org/gfv8f4

Irvine, M. A., Kuo, M., Buxton, J. A., Balshaw, R., Otterstatter, M., Macdougall, L., Milloy, M. J., Bharmal, A., Henry, B., Tyndall, M., Coombs, D., & Gilbert, M. (2019). Modelling the combined impact of interventions in averting deaths during a synthetic-opioid overdose epidemic. *Addiction, 114*(9), 1602–1613. https://doi.org/hsmd

Irwin, A., Jozaghi, E., Bluthenthal, R. N., & Kral, A. H. (2017). A cost-benefit analysis of a potential supervised injection facility in San Francisco, California, USA. *Journal of Drug Issues, 47*(2), 164–184. https://doi.org/f92zzp

Jackson, L. A., Dechman, M., Mathias, H, Gahagan, J., & Morrison, K. (2022). Safety and danger: Perceptions of the implementation of harm reduction programs in two communities in Nova Scotia, Canada. *Health and Social Care in the Community,30*(1), 360-371. https://doi.org/gkbjr9

Jefferies K., Tamlyn D., Aston M., & Tomblin Murphy G. (2019). Promoting visible minority diversity in Canadian nursing. *Canadian Journal of Nursing Research*, *51*(1), 3-5. https://doi.org/kjjc

Katz, N., Leonard, L., Wiesenfeld, L., Perry, J. J., Thiruganasambandamoorthy, V., & Calder, L. (2017). Support of supervised injection facilities by emergency physicians in Canada. *International Journal of Drug Policy*, *49*, 26-31. https://doi.org/h59w

Kelleher, S., & Cotter, P. (2009). A descriptive study on emergency department doctors' and nurses' knowledge and attitudes concerning substance use and substance users. *International Emergency Nursing*, *17*(1), 3–14. https://doi.org/fqk9nr

Kennedy M. C., Hayashi K., Milloy M. J., Wood E., & Kerr T. (2019). Supervised injection facility use and all-cause mortality among people who inject drugs in Vancouver, Canada: A cohort study. *Plos Medicine 16*(11), 1-20. https://doi.org/gk9k5b

Kennedy, M. C., Scheim, A., Rachlis, B., Mitra, S., Bardwell, G., Rourke, S., & Kerr, T. (2018). Willingness to use drug checking within future supervised injection services among people who inject drugs in a mid-sized Canadian city. *Drug and Alcohol Dependence*, *185*(Complete), 248–252. https://doi.org/gdhdbp

Kenney, S. R., Anderson, B. J., Bailey, G. L., Herman, D. S., Conti, M. T. & Stein, M. D. (2021). Examining overdose and homelessness as predictors of willingness to use supervised injection facilities by services provided among persons who inject Drugs. *The American Journal of Addictions, 30*(1), 21-25. https://doi.org/gmx3r8

Kerr, T., Mitra, S., Kennedy, M. C., & McNeil, R. (2017). Supervised injection facilities in Canada: Past, present, and future. *Harm Reduction Journal, 14*(1), 1-9. https://doi.org/gbhgx9

Kerr, T., Small, W., Moore, D., & Wood, E. (2007). A micro-environmental intervention to reduce the harms associated with drug-related overdose: Evidence from the evaluation of Vancouver's safer injection facility. *The International Journal on Drug Policy, 18*(1), 37–45. https://doi.org/ckr3gt

Khair, S., Eastwood, C. A., Lu, M., & Jackson, J. (2022). Supervised consumption site enables cost savings by avoiding emergency services: A cost analysis study. *Harm Reduction Journal, 19*(32), 1-7. https://doi.org/kj7d

Lange, B. C. L., & Bach-Mortesen, A., M. (2019). A systematic review of stakeholder perceptions of supervised injection facilities. *Drug and Alcohol Dependence, 197*, 299-314. https://doi.org/gmx3qb

Lowenstein, M., Sangha, H. K., Spadaro, A., Perrone, J., Delgado M. K., & Agarwal A. K. (2022). Patient perspectives on naloxone receipt in the emergency department: A qualitative exploration. *Harm Reduction Journal, 19*(97), 1-9. https://doi.org/gq7m5k

Macias-Konstantopoulos, W., Heins, A., Sachs, C. J., Whiteman, P. J., Wingkun, N. G., & Riviello, R. J. (2021). Between emergency department visits: The role of harm reduction programs in mitigating the harms associated with injection drug use. *Annals of Emergency Medicine*, *77*(5), 479–492. https://doi.org/gmx3q8x

Madah-Amiri, D., Skulberg, A. K., Braarud, A. C., Dale, O., Heyerdahl, F., Lobmaier, P., & Clausen, T. (2019). Ambulance-attended opioid overdoses: An examination into overdose locations and the role of a safe injection facility. *Substance Abuse, 40*(3), 383–388. https://doi.org/gmx3qh

Marshall, B. D. L., Milloy, M. J., Wood, E., Montaner, J. S., & Kerr, T. (2011). Reduction in overdose mortality after the opening of North America's first medically supervised safer injecting facility: A retrospective population-based study. *The Lancet, 377*(9775), 1429-1437. https://doi.org/bb6v79

McNeil R., Small W., Wood E., & Kerr T. (2014). Hospitals as a 'risk environment': An ethno-epidemiological study of voluntary and involuntary discharge from hospital against medical advice among people who inject drugs. *Journal of Social Science and Medicine, 105, 59-66.* https://doi.org/f5zvdp

Milloy M. S., Kerr T., Tyndall M., Montaner J., & Wood E. (2008). Estimated drug overdose deaths averted by North America's first medically-supervised safer injection facility. *Plos One, 3*(10), 1-6. https://doi.org/btrxxt

Moe, J., Wang E. Y., McGregor, M. J., Schull, M. J., Dong, K., Holroyd, B. R., Hohl, C. M., Grafstein, E., O'Sullivan, F., Trimble, J. & McGrail., K. M. (2022). People who make frequent emergency department visits based on persistence of frequent use in Ontario and Alberta: A retrospective cohort study. *CMAJ Open, 10*(1), E220-E231. https://doi.org/h8nw

Moore, J. (2021, December 12). *Statistics on addiction in Canada.* Calgary Dream Centre. https://calgarydreamcentre.com/statistics-on-addiction-in-canada/

Myer, A. J., & Belisle, L. (2018). Highs and lows: An interrupted time-series evaluation of the impact of North America's only supervised injection facility on crime. *Journal of Drug Issues, 48*(1), 36–49. https://doi.org/gmx3ss

National Institute of Mental Health. (n.d.) *Substance use and co-occurring mental disorders.* https://www.nimh.nih.gov/health/topics/substance-use-and-mental-health#%20%20%20%20%20%20%20:~:text=Occurring%20Mental%20Disorders-,Overview,drugs%2C%20alcohol%20%20%20%20%20%20%20%2C%20or%20medications

Notta, D., Black, B., Chu, T., Joe, R., & Lysyshyn, M. (2019). Changing risk and presentation of overdose associated with consumption of street drugs at a supervised injection site in Vancouver, Canada. *Drug and Alcohol Dependence, 196,* 46–50. https://doi.org/gmx3rj

Olding, M., Ivsins, A., Mayer, S., Betsos, A., Boyd, J., Sutherland, C., Culbertson, C., Kerr, T., & McNeil, R. (2020). A low-barrier and comprehensive community-based harm reduction site in Vancouver, Canada. *American Journal of Public Health, 110*(6), 833-835. https://doi.org/gmx3p7

Ontario Nurses Association. (2021). *Highlights of collective agreement changes as a result of the Gedalof decision and items in agreement between ONA and participating hospitals.* https://www.ona.org/wp-content/uploads/highlights-of-hospital-central-collective-agreement-changes-gedalof-bill-124-reopener.pdf

Patterson, T., Bharmal, A., Padhi, S., Buchner, C., Gibson, E., & Lee, V. (2018). Opening Canada's first Health Canada-approved supervised consumption sites. *Canadian Journal of Public Health, 109*(4), 581-584. https://doi.org/hsmf

Pauly, B., Wallace, B., Pagan, F., Phillips, J., Wilson, M., Hobbs, H., & Connolly, J. (2020). Impact of overdose prevention sites during a public health emergency in Victoria, Canada. *Plos One, 15*(5), 1-18. https://doi.org/gjg29q

Peltz, J. (2022, March 9). A look inside the 1st 'safe injection site' in the US. *Associated Press.* https://apnews.com/article/inside-nyc-supervised-drug-injection-sites-7ad93117d1566fda53909c0f70984d1b

Perera, R., Stephan, L., Appa, A., Giuliano, R., Hoffman, R., Lum, P., & Martin, M. (2022). Meeting people where they are: Implementing hospital-based substance use harm reduction. *Harm Reduction Journal*, *19*(1), 1-7. https://doi.org/kkbf

Ray, M. K., Beach, M. C., Nicolaidis, C., Choi, D., Saha, S., & Korthuis, P. T. (2013). Patient and provider comfort discussing substance use. *Family Medicine*, *45*(2), 109–117.

Registered Nurses' Association of Ontario. (2015). *Engaging clients who use substances.* https://rnao.ca/sites/rnao.ca/files/Engaging_Clients_Who_Use_Substances_13_WEB.pdf

Registered Nurses' Association of Ontario. (2018). *Implementing supervised injection services.* https://rnao.ca/sites/rnao-ca/files/bpg/Implementing_supervised_injection_services.pdf

Registered Nurses' Association of Ontario (2022a, January 29). Types of nursing. https://rnao.ca/about/types-nursing

Registered Nurses' Association of Ontario. (2022b, April 2). *Nurses speak out for harm reduction.* https://rnao.ca/about/public-impact/harm-reduction

Salters-Pedneault, K. (2020). The use of self-report data in psychology. https://www.verywellmind.com/definition-of-self-report-425267

Shreffler, J., Shaw, I., McGee, S., Bishop, C., Thé, S., O'Brien, D., Price, T., & Huecker, M. (2021). Perceptions diverge on aspects related to substance use disorder: An analysis of individuals in recovery, physicians, nurses, and medical students. *Substance Abuse*, *42*(4), 896-904. https://doi.org/hwjt

Smiley, R. A., Allgeyer, R. L., Shobo, Y., Lyons, K. C., Letourneau, R., Zhong, E., Kaminski-Ozturk, N. & Alexander, M. (2023). The 2022 national nursing workforce survey. Journal of Nursing Regulation, 14(1), 1-90. https://doi.org/kqz2

Smothers, Z., Reynolds, V., McEachern, M., Derouin, A. L., Carter, B. M., & Muzyk, A. (2018). Substance use education in schools of nursing: A systematic review of the literature. *Nurse Educator*, *43*(3), 136–139. https://doi.org/f9hr

Song, M. K., Lin, F. C., Ward, S. E., & Fine, J. P. (2013). Composite variables: When and how. *Nursing Research*, *62*(1), 45–49. https://doi.org/f4hc88

Statistics Canada. (2022, April 27). *Visible minority and population group reference guide, census of population, 2021.* https://www12.statcan.gc.ca/census-recensement/2021/ref/98-500/006/98-500-x2021006-eng.cfm

Stoltz, J., Wood, E., Small, W., Li, K., Tyndall, M., Montaner, J., & Kerr, T. (2007). Changes in injecting practices associated with the use of a medically supervised safer injection facility. *Journal of Public Health, 29*(1), 35–39. https://doi.org/dg969m

Taylor & Francis (2022). *Search peer-reviewed journals and articles*. www.tandfonline.com

The Joint United Nations Programme on HIV/AIDS. (2020). *Seizing the moment global aids update - tackling entrenched inequalities to end epidemics.* https://www.unaids.org/sites/default/files/media_asset/2020_global-aids-report_en.pdf

United Nations Office on Drugs and Crime. (2021a, June). *COVID-19 and drugs: Impact outlook.* https://www.unodc.org/res/wdr2021/field/WDR21_Booklet_5.pdf

United Nations Office on Drugs and Crime. (2021b, June). *Executive summary policy implications.* https://www.unodc.org/res/wdr2021/field/WDR21_Booklet_1.pdf

United Nations Office on Drugs and Crime. (2021c, June). *Global overview: Drug demand drug supply.* https://www.unodc.org/res/wdr2021/field/WDR21_Booklet_2.pdf

van Boekel, L. C., Brouwers, E. P., van Weeghel, J., & Garretsen, H. F. (2013). Stigma among health professionals towards patients with substance use disorders and its consequences for healthcare delivery: Systematic review. *Drug and Alcohol Dependence*, *131*(1-2), 23–35. https://doi.org/f47f9g

Vancouver Coastal Health. (2022, June 21). *Supervised consumption sites.* http://www.vch.ca/public-health/harm-reduction/supervised-consumption-sites

Wegner, L., Arreola, S. G., & Kral, A. H. (2011). The prospect of implementing a safer injection facility in San Francisco: Perspectives of community stakeholders. *International Journal of Drug Policy, 22*(3), 239-241. https://doi.org/b63955

Wild, T. C., Koziel, J., Anderson-Baron, J., Asbridge, M., Belle-Isle, L., Dell, C., Elliott, R., Hathaway, A., MacPherson, D., McBride, K., Pauly, B., Strike, C., Galovan, A., & Hyshka, E. (2021). *Public support for harm reduction: A population survey of Canadian adults. Plos One, 16*(5), 1-18. https://doi.org/g35d

Windsor Essex County Health Unit. (2021, May 10). *Opioid overdose statistics*. https://www.wechu.org/sites/default/files/pdf/opioid-overdose-statistics-media-presentation-may-10-2021.pdf

Windsor Essex County Health Unit. (2022a, May 9). *Get help with drug, alcohol, and other addictions.* https://www.wechu.org/chronic-disease/get-help-drug-alcohol-and-other-addictions

Windsor Essex County Health Unit. (2022b, June 20). *Opioid overdose statistics.* https://www.wechu.org/reports/opioids

Windsor Essex County Health Unit. (2022c, July 5). *Past alerts*. https://wecoss.ca/past-alerts

Wood, E., Tyndall, M. W., Zhang, R., Montaner, J. S. G., & Kerr, T. (2007). Rate of detoxification service use and its impact among a cohort of supervised injecting facility users. *Addiction*, 102(6), 916–919. https://doi.org/cqs535

World Health Organization. (2017). *Global hepatitis report.* https://www.who.int/publications/i/item/9789241565455

World Health Organization. (2020). *State of the world's nursing 2020: Investing in education, jobs, and leadership*. https://www.who.int/publications/i/item/9789240003279

World Health Organization. (2021, August 4). *Opioid overdose.* https://www.who.int/news-room/fact-sheets/detail/opioid-overdose

Yen, P. Y., Kellye, M., Lopetegui, M., Saha, A., Loversidge, J., Chipps, E. M., Gallagher-Ford, L., & Buck, J. (2018). Nurses' time allocation and multitasking of nursing activities: A time motion study. *AMIA Annual Symposium Proceedings Archive,* 1137–1146. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6371290/pdf/2975707.pdf

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Appendix B

Survey Questions

This survey was adapted using parts of the surveys found in Jackson et al. (2022), Katz et al. (2017), and Shreffler et al. (2021). Permission to use the surveys was obtained from the journals in which the articles were published.

(F) = force completion (O) = optional

Demographics:

1. Are you a registered nurse who currently works in the emergency department? (F)
   a) No
   b) Yes

2. How many years have you been a nurse? (F)
   a) <1 year
   b) 1-5 years
   c) 6-10 years
   d) >10 years

3. How long have you worked in the emergency department as a nurse? (F)
   a) <1 year
   b) 1-5 years
   c) 6-10 years
   d) >10 years

4. Have you ever worked or trained outside of Ontario? (F)
   a) No
   b) Yes - please specify where: _____ (O)

5. How much training/education have you had on harm reduction? Select all that apply. (F)
   a) None
   b) While in school/part of the curriculum
   c) While in hospital orientation
   d) Attended one training/education class on the job
   e) Attended more than one training/education class on the job
   f) Other _____ (O)

Terms Defined:

Supervised consumption sites - are legally sanctioned spaces where people can use their own drugs in a safe, and clean environment in the presence of trained personnel. SCSs

are a form of harm reduction, and they can offer a range of different services within them such as drug checking, basic medical and emergency care, access to counselling and rehabilitation, referrals to substance use and mental health treatments, a place to dispose of needles and sharps and obtain new drug equipment, and access to medications that can treat or reverse the effects of drugs.

Substance use disorder – is a mental disorder that causes people's inability to control their substance use. Substances can include drugs, alcohol, or medications.

6. Please rank your level of **knowledge** regarding evidence and operations of a supervised consumption site: (F)

a) Do not know anything about it
b) Low level
c) Moderate level
d) High level
e) Very high level (expert)

7. Please rank your level of **experience** regarding evidence and operations of a supervised consumption site? (F)

a) No experience
b) Low level
c) Average level
d) High level
e) Very high level (expert)

8. Please rank your level of **comfort** with referring patients to a supervised consumption site: (F)

a) Very uncomfortable
b) Uncomfortable
c) Neutral
d) Comfortable
e) Very comfortable

9. How often do you care for patients who have a known or suspected substance use disorder **at your workplace**? (F)

a) Less than once per year
b) Once per year
c) Once every 3-6 months
d) Once in two weeks to once per month
e) A few times to once per week
f) Daily

10. Please rank your level of **personal experience** (outside of work) with people who have a known or suspected substance use disorder? (F)

a) No experience

b) Low level
c) Average level
d) High level
e) Very high level (expert)

11. Please rank your level of **comfort** with interacting with people who have a known or suspected substance use disorder? (F)

a) Very uncomfortable
b) Uncomfortable
c) Neutral
d) Comfortable
e) Very comfortable

12. Please answer the following question by checking all the options that apply. (F)

In the past 6 months, I have treated an adult patient in the ED who:

- ☐ I suspected or who admitted to using intravenous recreational drugs
- ☐ I suspected or who admitted to smoking drugs such as crack-cocaine or methamphetamine
- ☐ Presented with an abscess or other bacterial skin infections I suspected or knew to be related to injection drug use
- ☐ Presented with systemic infections (e.g., endocarditis, deep-vein thrombosis) I suspected or knew to be related to injection drug use
- ☐ Presented with an opiate overdose
- ☐ Presented with another type of recreational drug overdose

Questions 13-18: Please respond to the following statements regarding your level of agreement (Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree).

13. Perceptions of substance use disorders: **(F)**

Question:	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a) Recovering from a substance use disorder is difficult.	☐	☐	☐	☐	☐
b) Patients understand the difficulty of recovering from a substance use disorder.	☐	☐	☐	☐	☐
c) Nurses understand the difficulty of recovering from a substance use disorder.	☐	☐	☐	☐	☐
d) Physicians understand the difficulty of recovering from a substance use disorder.	☐	☐	☐	☐	☐

e) Recovering from a substance use disorder is a lifelong process.	☐	☐	☐	☐	☐
f) More work must be done to minimize the stigma related to a substance use disorder.	☐	☐	☐	☐	☐
g) Peer support can have a positive impact on the chances of recovery.	☐	☐	☐	☐	☐
h) Access to available treatment options for individuals in need is currently a problem.	☐	☐	☐	☐	☐
i) Individuals with a substance use disorder have usually experienced significant adverse life events.	☐	☐	☐	☐	☐
j) To recover, individuals suffering from a substance use disorder need to move to a new environment.	☐	☐	☐	☐	☐
k) Health care providers treat individuals with substance use disorders differently than other patients.	☐	☐	☐	☐	☐

14. I believe that... (F)

Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a) People who use and/or inject drugs place a heavy burden on my department by contributing to ED overcrowding	☐	☐	☐	☐	☐
b) People who use and/or inject drugs MOSTLY come to my ED for problems that are preventable	☐	☐	☐	☐	☐
c) People who use and/or inject drugs OFTEN come to my ED with advanced conditions that could have been more easily controlled with earlier medical treatment	☐	☐	☐	☐	☐
d) People who use and/or inject drugs SOMETIMES come to the ED for services that could	☐	☐	☐	☐	☐

be adequately provided by supervised consumption sites					
e) People who use and/or inject drugs FREQUENTLY come to the ED for services that could be adequately provided by supervised consumption sites	☐	☐	☐	☐	☐
f) Implementation of supervised consumption sites could reduce the number of visits to the ED by people who use and/or inject drugs by preventing some medical complications	☐	☐	☐	☐	☐
g) Implementation of a supervised consumption sites could reduce the rates of human immunodeficiency virus and hepatitis C among people who use and/or inject drugs in my community	☐	☐	☐	☐	☐
h) Implementation of a supervised consumption site could reduce the number of visits to the ED by providing non-medical services (e.g., addiction services and resources, access to social workers)	☐	☐	☐	☐	☐
i) Implementation of a supervised consumption site could increase links to care and support for people who inject drugs who also suffer from concurrent disorders	☐	☐	☐	☐	☐
j) Implementation of a supervised consumption site in my community would decrease wait times in my ED	☐	☐	☐	☐	☐

15. I believe that… (F)

Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a) Distributing sterile needles could reduce ED visits by preventing medical	☐	☐	☐	☐	☐

complications (e.g., Abscess, systemic infections)					
b) There are not enough community services to treat people who use and/or inject and use drugs	□	□	□	□	□
c) The emergency department is not an optimal location for people who use and/or inject drugs to come for non-medical (e.g., social) issues	□	□	□	□	□

16. I believe that... (F)

Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a) Supervised consumption sites could benefit the general public by reducing drug-related paraphernalia discarded in public places (e.g., parks, streets)	□	□	□	□	□
b) Supervised consumption sites could benefit the general public by reducing exposure to recreational drug use	□	□	□	□	□
c) Supervised consumption sites could decrease EMS use for individuals who are found with decreased responsiveness in the community due to drug overdose	□	□	□	□	□
d) Supervised consumption sites could create dangerous neighbourhoods	□	□	□	□	□

17. I believe that… (F)

Question:	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a) Supervised consumption sites create a safe place to use.	☐	☐	☐	☐	☐
b) Supervised consumption sites: ensures that trained staff are ready to respond in case of overdose	☐	☐	☐	☐	☐
c) Supervised consumption sites: keeps drug use and needles off the streets	☐	☐	☐	☐	☐
d) Supervised consumption sites: could get help with other health problems	☐	☐	☐	☐	☐
e) Supervised consumption sites: helps people use more safely	☐	☐	☐	☐	☐
f) Supervised consumption sites: could access other supportive services	☐	☐	☐	☐	☐
g) Supervised consumption sites: reduces pressure to share drugs with others	☐	☐	☐	☐	☐

18. I believe that… (F)

Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a) Supervised consumption sites could be beneficial to the health of people who use and/or inject drugs	☐	☐	☐	☐	☐
b) Supervised consumption sites can be beneficial to the operations of my ED	☐	☐	☐	☐	☐
c) Supervised consumption sites promote drug use	☐	☐	☐	☐	☐
d) There may be positive aspects to supervised consumption sites, however, I am ethically opposed to them	☐	☐	☐	☐	☐
e) Drug addiction is a choice	☐	☐	☐	☐	☐

f) Drug use and addiction are a public health issue and are not appropriately dealt with through criminal law	□	□	□	□	□
g) The current evidence does not support supervised consumption sites in improving health outcomes of patients with recreational drug addiction	□	□	□	□	□
h) I would refer my patients who use and/or inject drugs to a supervised consumption site for additional harm reduction and addiction services a) If you disagree, why?_____(O)	□	□	□	□	□
i) I would support the implementation of a supervised consumption site in my community a) If you disagree, why? (O)	□	□	□	□	□

19. Please select **top 7 items** you feel to be the most important features to have as part of supervised consumption site. (F)

In my opinion, supervised consumption sites should have:

- □ Needle exchange programs/distribution of new drug supplies (e.g., syringes, needles, sterile water, filters)
- □ Drug Checking Services (detects the contents of drugs to help people who use drugs make more informed decisions about their consumption)
- □ Trained medical doctors on site
- □ Trained RNs for health care (e.g., wound/abscess care)
- □ Trained RNs for safe drug use teaching
- □ Addiction Counsellors
- □ Mental Health Professionals (e.g., social workers, psychologists)
- □ Human immunodeficiency virus and hepatitis point of care testing
- □ Access to methadone or other opioids such as suboxone if prescribed by a doctor
- □ Referrals to withdrawal/addiction treatment centres
- □ Naloxone/Narcan Kits
- □ Peer-support programmes

- A women's only area
- Close proximity to a hospital/healthcare centre
- Close proximity to the city's downtown
- Culturally appropriate services for Indigenous people (e.g., Indigenous service providers)

20. Which of the following harm reduction strategies do you think should be **offered in the ED**? Select all that apply: (F)

- Needle exchange programs/distribution of new drug supplies (e.g., syringes, needles, sterile water, filters)
- Drug Checking Services (detects the contents of drugs to help people who use drugs make more informed decisions about their consumption)
- Drug-related wound/abscess care
- Safe drug use teaching
- Addiction Counsellors
- Mental Health Professionals (e.g., social workers, psychologists)
- Human immunodeficiency virus and hepatitis point of care testing
- Access to methadone or other opioids such as suboxone if prescribed by a doctor
- Referrals to withdrawal/addiction treatment centers
- Naloxone/Narcan Kits
- Peer-support programmes
- Culturally appropriate services for Indigenous people (e.g., Indigenous service providers)

21. What is your age? (O)
a) 20-30 years old
b) 31-40 years old
c) 41-50 years old
d) 51-60 years old
e) 61+ years old

22. What gender do you most identify with? (O)
a) _____ (O)
b) Prefer not to say

23. What is your ethnicity? (O)
White
South Asian (e.g., East Indian, Pakistani, Sri Lankan)
Chinese
Black
Filipino
Latin American
Arab
Southeast Asian (e.g., Vietnamese, Cambodian, Laotian, Thai)
West Asian (e.g., Iranian, Afghan)

Korean
Japanese
Indigenous (e.g., Metis, Inuq [Innuit], First Nations)
Other (please specify): _____(O)

24. What is your primary worksite? (O)
a) [redacted]
b) [redacted]
c) [redacted]
d) [redacted]
e) [redacted]

25. I confirm that I want my responses submitted. (O)
Yes
No

26. Would you like to provide your contact information for any follow-up questions or future studies related to this topic? (F)
a) No
b) Yes
Name/email/phone number: _____

Please click on the link below to access local resources that are available for addiction treatment, and drug use and abuse referral services.

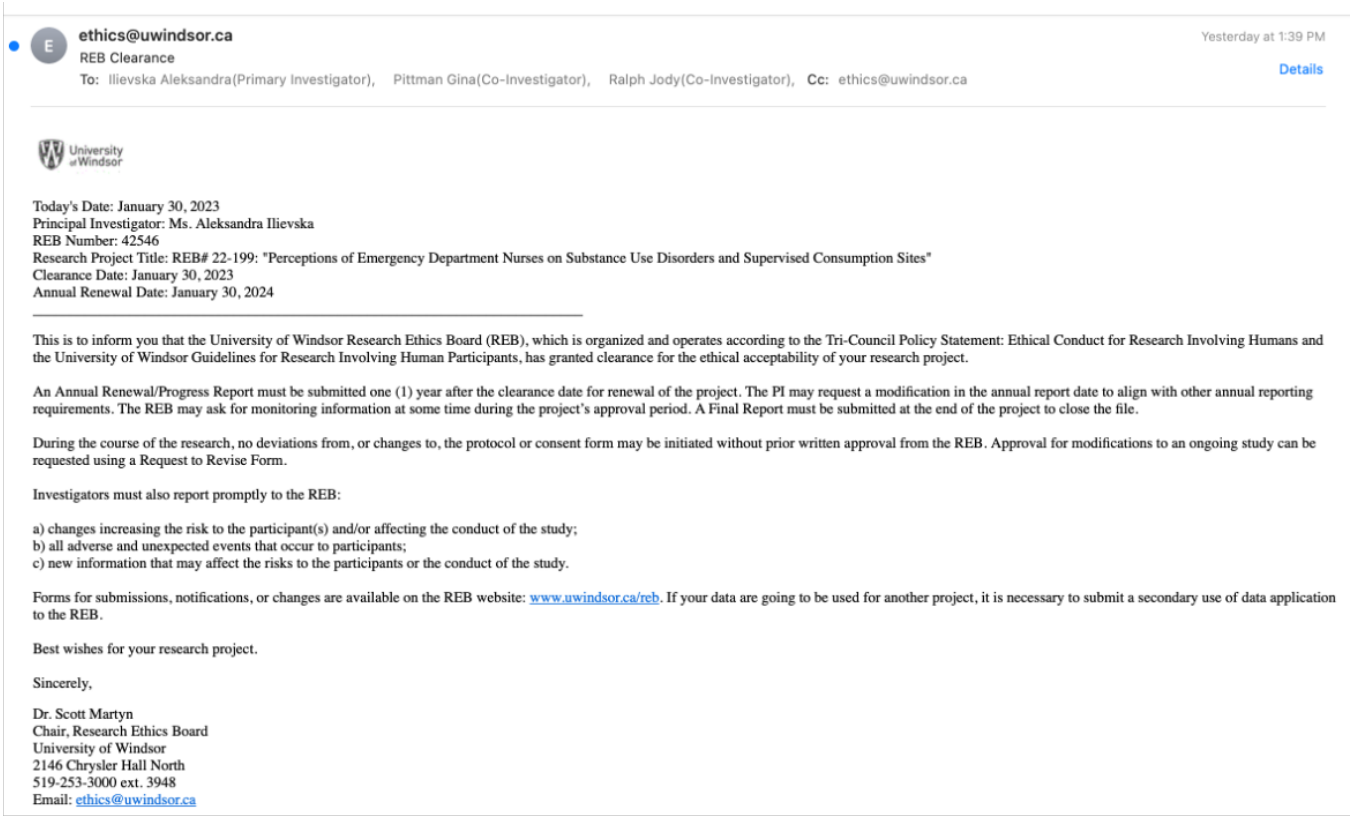
Resources for participants

Thank you so much for participating in the survey. Your input is very important and appreciated. Please go to the next page to receive an e-gift card of your choice. Your responses to this survey will not be linked to your personal information.

27. Please indicate if you would like to receive an e-gift card for your participation in our study: (F)
a) Yes, I choose to receive a $15 Starbucks e-gift card
b) Yes, I choose to receive a $15 Tim Horton's e-gift card
c) No, I choose not to receive an e-gift card

Appendix C

REB Clearances



ethics@uwindsor.ca
REB Clearance
To: Ilievska Aleksandra(Primary Investigator), Pittman Gina(Co-Investigator), Ralph Jody(Co-Investigator), Cc: ethics@uwindsor.ca
Yesterday at 1:39 PM
Details

University of Windsor

Today's Date: January 30, 2023
Principal Investigator: Ms. Aleksandra Ilievska
REB Number: 42546
Research Project Title: REB# 22-199: "Perceptions of Emergency Department Nurses on Substance Use Disorders and Supervised Consumption Sites"
Clearance Date: January 30, 2023
Annual Renewal Date: January 30, 2024

This is to inform you that the University of Windsor Research Ethics Board (REB), which is organized and operates according to the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans and the University of Windsor Guidelines for Research Involving Human Participants, has granted clearance for the ethical acceptability of your research project.

An Annual Renewal/Progress Report must be submitted one (1) year after the clearance date for renewal of the project. The PI may request a modification in the annual report date to align with other annual reporting requirements. The REB may ask for monitoring information at some time during the project's approval period. A Final Report must be submitted at the end of the project to close the file.

During the course of the research, no deviations from, or changes to, the protocol or consent form may be initiated without prior written approval from the REB. Approval for modifications to an ongoing study can be requested using a Request to Revise Form.

Investigators must also report promptly to the REB:

a) changes increasing the risk to the participant(s) and/or affecting the conduct of the study;
b) all adverse and unexpected events that occur to participants;
c) new information that may affect the risks to the participants or the conduct of the study.

Forms for submissions, notifications, or changes are available on the REB website: www.uwindsor.ca/reb. If your data are going to be used for another project, it is necessary to submit a secondary use of data application to the REB.

Best wishes for your research project.

Sincerely,

Dr. Scott Martyn
Chair, Research Ethics Board
University of Windsor
2146 Chrysler Hall North
519-253-3000 ext. 3948
Email: ethics@uwindsor.ca

[redacted]

Meeting Review Date: February 22, 2023

Project Title: Perceptions of Emergency Department Nurses on Substance Use Disorders and Supervised Consumption Sites

Principal Investigator Aleksandra Ilievska

REB File Reference: REB # 23-456

Submission Documents Reviewed:

- Ethics Submission Form for Chart Abstraction
- Qualtrics Survey, Survey Permissions
- UWindsor REB Clearance

Type of Approval: **Category A – Full Approval**

Annual Renewal Date: February 2, 2024

[redacted] is constituted and operated in accordance with the Tri-Council Policy Statement for Ethical Conduct of Research Involving Humans (TCPS2) 2022, Canadian Food & Drug Regulations, Division 5 (Clinical Trials), ICH Good Clinical Practice Guidelines E6, U.S. Code of Federal Regulations Title 21 & 45, Federal Wide Assurance (FWA) with the U.S. Office of Human Research Protection, and the Personal Health Information Protection Act, 2004 (PHIPA).

A quorum was present and only voting Research Ethics Board members who are independent of the investigator(s) conducting the study participated in decisions relating to this research.

Your project received a Category A – full approval your research project (granted clearance for ethical acceptability).

An **Annual Renewal Request** must be submitted **one (1) year** after the approval date for renewal of this project. The REB may additionally ask for monitoring information during the project's approval period, if necessary. A final **Study Completion Report** must be submitted at the end of the project to close the file.

During the course of the research, no deviations from, or changes to, the protocol/proposed project as submitted or documents as approved (i.e. consent form, data collection form, surveys, etc) may be initiated without prior written approval from the [redacted] (except when necessary to eliminate hazard(s) to study participants and [redacted] should be notified of these changes promptly after the change is made). Changes to

[redacted]

study team members should also be reported to [redacted]s amendments. Approvals for modifications to an ongoing study may be requested using an **Amendment Request form**.

Investigators must also promptly report to the REB:

a) Changes increasing the risk to the participant(s) and/or affecting the conduct of the study;
b) All adverse and unexpected events that occur to participants;
c) New information that may affect the risks to the participants or the conduct of the study.

[redacted]

[redacted]

Sincerely,

[redacted]

February 22, 2023

Date

BR [redacted]

To: Aleksandra Ilievska

Wed 2023-02-22 7:47 AM

Good morning Aleksandra,

I would like to take this opportunity on behalf of the [redacted] thank you for taking the time to submit your project "Perceptions of Emergency Department Nurses on Substance Use Disorders and Supervised Consumption Sites" for consideration.
The above noted research application study was reviewed by the [redacted] Approval is granted to conduct the research project in accordance with the protocol specified in the application.

Requirements for ongoing approval:

a. Annual review of the submission will be undertaken by the [redacted] The annual review will coincide with your REB Annual Renewal Date.
b. Adverse events experienced by subjects enrolled in the trial must be reported to the [redacted] Committee.
c. Any changes in the protocol, information sheets, questionnaires, or informed consent documents must be reported to the [redacted] immediately.
d. The [redacted] shall be notified in writing by the principal applicant/office of the principal applicant when the study is complete. The Research Committee would be interested in receiving a short summary of the progress of the trial (i.e. number of patients enrolled, problems encountered, etc.) and a full report of study results, in a timely manner.
e. Should the applicant wish to renew the study for another term, written notice should be provided to the [redacted] two months in advance of commencement of the desired extension. Completion of another application form may be required.

If you have any questions or require additional information, please feel free to contact [redacted]

Congratulations! We look forward to hearing about your final project.

[redacted]

March 1, 2023

[redacted]

Research Project Title: Perceptions of Emergency Department Nurses on Substance Use Disorders and Supervised Consumption Sites

Principal Investigator: Aleksandra Ilivska
[redacted]

Mailing Address
[redacted]

Copies To: Dr. Gina Pittman
gina.pittman@uwindsor.ca
Dr. Jody Ralph
jody.ralph@uwindsor.ca

Emplacements
[redacted]

[redacted]eference No. 08FEB2023

[redacted]

The Research Project noted above was granted approval on behalf of the [redacted] This approval is granted for a one-year period from the date of this letter.

A Status Report and/or Final Report is due within 30 days of the close of the research project, or when a request for annual renewal is submitted.

During the course of the research, no deviations from or changes to the protocol or consent form may be initiated without prior written approval from the ERB except when necessary to eliminate immediate hazards to the subject (e.g. increased risk). Also, when the changes involve only logistical or administrative aspects of the study (e.g. change in monitor, change in contact information). Expedited review of minor changes in ongoing studies will be considered.

We wish you every success in your research.

[redacted]

[redacted]Chair
[redacted]

Together, Growing a Healthier Community

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Appendix D

Recruitment Emails

Initial Recruitment Email

Subject line: Participants needed for study on emergency department nurses' perceptions of substance use disorders and supervised consumption sites

Title of study: Perceptions of Emergency Department Nurses on Substance Use Disorders and Supervised Consumption Sites

To all registered nurses working in the ED at [redacted],[redacted], [redacted], redacted], or [redacted], you are invited to participate in a research study and share your perceptions toward substance use disorders and supervised consumption sites. The title of the study is "Perceptions of Emergency Department Nurses on Substance Use Disorders and Supervised Consumption Sites". The research will be conducted by Aleksandra Ilievska (MScN student), under the supervision of Dr. Gina Pittman and Dr. Jody Ralph from the Department of Nursing at the University of Windsor. You are asked to complete a brief online survey estimated to take 15 minutes. All ED nurses who complete the survey will be offered a $15 e-gift card to either Tim Horton's or Starbucks as a token of our appreciation for your time. The e-gift card will be sent to your institutional (hospital) email address. This study will be cleared by the University of Windsor's Ethics Board and the (insert hospitals' own REB board). Survey participation is voluntary, and participation will not affect your employment. Your responses will be confidential, and your name will not be linked to the survey data. You can withdraw at any point in the survey and your responses will only be recorded if confirm that you want your responses submitted. If you have any questions regarding the study, please contact Aleksandra Ilievska at [redacted] Thank you in advance for your participation in this study. For added privacy, do not forget to clear your browsing history after you have completed the survey! Here is how to do it: Choose history (either at the top of your screen or by clicking the three dots on the right side of the search bar → then click the drop-down menu → choose how far back you want your browsing history cleared →click clear data).

Click the link below or scan the QR code to launch the survey:

[LINK TO SURVEY]

https://uwindsor.ca1.qualtrics.com/jfe/form/SV_88oSBTkzS7iFvnM

[QR CODE]

****If you complete the survey and do not receive your e-gift card within two weeks of completion and wish to, please check your junk folder FIRST. If not received, contact [redacted].**

Thank you all for your time,
Aleksandra Ilievska, RN, MScN student

Reminder Email #1

Subject line: Participants needed for study on emergency department nurses' perceptions of substance use disorders and supervised consumption sites

Title of study: Perceptions of Emergency Department Nurses on Substance Use Disorders and Supervised Consumption Sites

To all registered nurses working in the ED at [redacted], [redacted], [redacted], or [redacted], you are invited to volunteer to participate in a research study and share your perceptions toward substance use disorders and supervised consumption sites. The title of the study is "Perceptions of Emergency Department Nurses on Substance Use Disorders and Supervised Consumption Sites". The research will be conducted by Aleksandra Ilievska (MScN student), under the supervision of Dr. Gina Pittman and Dr. Jody Ralph from the Department of Nursing at the University of Windsor. On (insert date), you were asked to complete a brief online survey estimated to take 15 minutes. **This survey will be closing in two weeks.** All ED nurses who complete the survey will be offered a $15 e-gift card to either Tim Horton's or Starbucks as a token of our appreciation for your time. The e-gift card will be sent to your institutional (hospital) email address. This study has been cleared by the University of Windsor's Research Ethics Board and (insert hospitals' own REB board). Survey participation is voluntary, and participation will not affect your employment. Your responses will be confidential, and your name will not be linked to the survey data. You can withdraw at any point in the survey and your responses will only be recorded if confirm that you want your responses submitted. Please complete the survey in private, away from patient care, and/or on break. If you have any questions regarding the study, please contact Aleksandra Ilievska at [redacted]. Thank you in advance for your participation in this study. For added privacy, do not forget to clear your browsing history after you have completed the survey! Here is how to do it: Choose history (either at the top of your screen or by clicking the three dots on the

right side of the search bar → then click the drop-down menu → choose how far back you want your browsing history cleared → click clear data).

Click the link below or scan the QR code to launch the survey:

[LINK TO SURVEY]

https://uwindsor.ca1.qualtrics.com/jfe/form/SV_88oSBTkzS7iFvnM

[QR CODE]

****If you complete the survey and do not receive your e-gift card within two weeks of completion and wish to, please check your junk folder FIRST. If not received, contact [redacted]****

Thank you all for your time,
Aleksandra Ilievska, RN, MScN student

Reminder Email #2

Subject line: Participants needed for study on emergency department nurses' perceptions of substance use disorders and supervised consumption sites

Title of study: Perceptions of Emergency Department Nurses on Substance Use Disorders and Supervised Consumption Sites

To all registered nurses working in the ED at [redacted], [redacted], [redacted], or Erie [redacted], you are invited to volunteer to participate in a research study and share your perceptions toward substance use disorders and supervised consumption sites. The title of the study is "Perceptions of Emergency Department Nurses on Substance Use Disorders and Supervised Consumption Sites". The research will be conducted by Aleksandra Ilievska (MScN student), under the supervision of Dr. Gina Pittman and Dr. Jody Ralph from the Department of Nursing at the University of Windsor. On (insert date), you were asked to complete a brief online survey estimated to take 15 minutes. **This survey will be closing in one week.** All ED nurses who complete the survey will be offered a $15 e-gift card to either Tim Horton's or Starbucks as a token of our appreciation for your time. The e-gift card will be sent to your institutional (hospital) email address. This study has been cleared by the University of Windsor's Research Ethics Board and (insert

hospitals' own REB board). Survey participation is voluntary, and participation will not affect your employment. Your responses will be confidential, and your name will not be linked to the survey data. You can withdraw at any point in the survey and your responses will only be recorded if confirm that you want your responses submitted. Please complete the survey in private, away from patient care, and/or on break. If you have any questions regarding the study, please contact Aleksandra Ilievska at [redacted]. Thank you in advance for your participation in this study. For added privacy, do not forget to clear your browsing history after you have completed the survey! Here is how to do it: Choose history (either at the top of your screen or by clicking the three dots on the right side of the search bar → then click the drop-down menu → choose how far back you want your browsing history cleared → click clear data).

Click the link below or scan the QR code to launch the survey:

[LINK TO SURVEY]

https://uwindsor.ca1.qualtrics.com/jfe/form/SV_88oSBTkzS7iFvnM

[QR CODE]

****If you complete the survey and do not receive your e-gift card within two weeks of completion and wish to, please check your junk folder FIRST. If not received, contact [redacted].****

Thank you all for your time,
Aleksandra Ilievska, RN, MScN student

Appendix E

Recruitment Poster

Appendix F

Consent to Participate in Research

TITLE OF STUDY
Perceptions of Emergency Department Nurses on Substance Use Disorders and Supervised Consumption Sites

You are asked to participate in a research study conducted by Aleksandra Ilievska (MScN student), under the supervision of Dr. Gina Pittman and Dr. Jody Ralph from the Department of Nursing at the University of Windsor. The results of this study will contribute to a Master of Science in Nursing thesis that explores emergency department (ED) nurses' perceptions of substance use disorders and supervised consumption sites (SCSs). If you have any questions or concerns about the research, please feel free to contact Aleksandra Ilievska [redacted], Dr. Pittman (gina.pittman@uwindsor.ca or 519-253-3000 ext. 4812), or Dr. Ralph (jody.ralph@uwindsor.ca or 519-253-3000 ext. 2271).

PURPOSE OF THE STUDY
The purpose of this study is to explore ED nurses' perceptions of substance use disorders and supervised consumption sites across four Southwestern Ontario hospitals. A supervised consumption site is a legally sanctioned space where people can use their own drugs in a safe, and clean environment in the presence of trained personnel. SCSs are a form of harm reduction, and they can offer a range of different services within them such as drug checking, basic medical and emergency care, access to counselling and rehabilitation, referrals to substance use and mental health treatments, a place to dispose of needles and sharps and obtain new drug equipment, and access to medications that can treat or reverse the effects of drugs. Substance use disorder is a mental disorder that causes people's inability to control their substance use. Substances can include drugs, alcohol, or medications.

PROCEDURES
If you volunteer to participate in this study, you will be asked to complete an online survey that asks demographic information about you, as well as questions related to your perceptions of substance use disorders and supervised consumption sites. Please complete the survey in private, away from patient care, and/or on break. The survey is estimated to take approximately 15 minutes to complete, does not need to be completed it in one try, and your participation is voluntary and confidential.

POTENTIAL RISKS AND DISCOMFORTS
You may experience some level of psychological discomfort or distress in response to the questions as you reflect on recent experiences that you may have found to be sensitive or triggering. To reduce these risks, you may benefit from accessing the below resources.

Please access the ones that apply to you the most:

If you work at [redacted], follow this QR code:

Windsor Essex County Health Unit. (2022a, May 9). Get help with drug, alcohol, and other addictions. https://www.wechu.org/chronic-disease/get-help-drug-alcohol-and-other-addictions

If you work at [redacted], follow this QR code:

Erie St. Clair Health Line. (2022). Alcohol and drug addiction assessment and treatment – Chatham – Kent. https://www.eriestclairhealthline.ca/listServicesDetailed.aspx?id=10095&region=ChathamKent

If you work at [redacted], follow this QR code:

Age-friendly Sarnia-Lambton. (n.d.). Alcohol and drug addiction assessment and treatment. https://agefriendlysarnialambton.ca/Services/List/10095/Alcohol_and_Drug_Addiction_Assessment_and_Treatment

Resources for participants

You are reminded that your participation will remain confidential and voluntary. You can withdraw from the study at any time before answering "yes" to the last question of the

survey “I confirm that I want my responses submitted.” There is also no withdrawal penalty, and your employment is not affected by your responses or withdrawal in any way. If you withdraw, you will not be compensated for any of the responses you may have provided as all your data will be removed and not used for analysis. After the completion of the survey, you will be provided with information about resources available for addiction treatment, drug use, and abuse referral services once again. Additionally, you may also experience social risks and dual/multiple relationship risks as you may be completing the survey at work, may be using the same computers as your coworkers, and may have or had dual relationships with Aleksandra Ilievska, Dr. Ralph, Dr. Pittman and/or your manager (e.g., social relationships, work relationships, schoolmates, professor/student relationships). However, all information collected will be confidential, the data collected will not be linked to any identifying information, you are instructed to complete the survey in private, and research group members have been identified to ensure you are fully aware of all the team members, and your employment will not be affected by participating or not participating in this study. Your responses will be recorded for analysis if you answer “yes” to the last question, “I confirm that I want my responses submitted”. If you choose “no”, the data that you may have answered will be discarded and will not be used for analysis.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

You will receive firsthand experience participating in scholarly research. In addition, you will have an opportunity to share your thoughts, feelings, and views toward substance use disorders and supervised consumption sites. You can benefit from knowing that your experiences and voice will be heard, which may further contribute to filling gaps in knowledge, making policy changes, improving the quality of care of your patients, and building safer communities. This project will allow you, the front-line workers who care for individuals affected by drug use to express your opinions on an important topic affecting thousands of people locally, provincially, nationally, and globally. This study’s results may yield critical information that could contribute to a larger body of literature on ED nurses’ perceptions of substance use disorders and SCSs and may inform what services are needed in the ED and/or at Windsor’s future SCS and may inform the training needs about harm reduction and/or stigma. Lastly, you will be provided with resources for addiction treatment, drug use, and abuse referral services to access or share with others that you may not have been aware of.

COMPENSATION FOR PARTICIPATION

You will be offered a $15 e-card to either Tim Horton’s or Starbucks for your participation. The e-card will be sent to your institutional (hospital) email address at the end of the survey if you choose to accept the compensation and provide your email. You will receive your e-gift card of $15 within a week, as e-gift cards will be sent out once a week to participants during the study period. Your email will not be linked to the answers you provide in the survey. All emails will be deleted once all gift cards have been distributed and notification of delivery has been received.

CONFIDENTIALITY

All information obtained from the survey will be confidential. This is a multi-site study,

which will help decrease the risk of you being identified. Your employer will not have access to any of the data that is being provided in the survey. Additionally, all study data will be anonymous and stored on a password-protected computer. Files to be shared with the thesis committee will also be password-protected and stored in a folder on the University of Windsor's OneDrive data cloud. These files will only be accessible to the research team and access to the data will be through the Global Protect VPN to increase security. You are reminded to clear your computer's browsing history, if desired, to ensure that the survey completion cannot be linked to you. You can do this by choosing history (either at the top of your screen or by clicking the three dots on the right side of the search bar -> then click the drop-down menu -> choose how far back you want your browsing history cleared -> click clear data). The link and QR code can also be accessed through a personal device if preferred for added security and comfort. Should any publications or presentations stem from this research, only aggregated data will be shared.

PARTICIPATION AND WITHDRAWAL

You can decide whether you would like to participate in this study or not. If you choose not to participate, there will not be any consequences, nor will your employer know that you did not participate. If you choose to participate, you can withdraw until you submit the last question confirming that you want your responses submitted. Submission of the survey implies consent, and your responses get submitted anonymously. If you withdraw from the study, you will not be compensated for any of the questions you may have answered as all the data will be discarded and not used for analysis.

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE PARTICIPANTS

The research findings of this study will be made available to participants at: https://scholar.uwindsor.ca/research-result-summaries/.

SUBSEQUENT USE OF DATA

These data may also be used in subsequent studies, publications, and presentations. The hospital sites may also use these data to fill gaps in knowledge, amend current policies, improve the quality of care, and build safer communities.

RIGHTS OF RESEARCH PARTICIPANTS

If you have questions regarding your rights as a research participant, please contact your organization-specific Research Ethics Board:

[redacted]
The Office of Research Ethics
University of Windsor, Windsor, Ontario, N9B 3P4
Telephone: 519-253- 3000, ext. 3948
E-mail: ethics@uwindsor.ca

[redacted]
Research Ethics Office
[redacted]

[redacted]
[redacted]
[redacted]

[redacted]
[redacted]
[redacted]
[redacted]

[redacted]
[redacted]
[redacted]
[redacted]
[redacted]

If you have any study specific questions, please contact:

Ms. Aleksandra Ilievska
Principal Investigator
E-mail: [redacted]

CONSENT OF RESEARCH PARTICIPANT
I understand the information provided for the study "Perceptions of Emergency Department Nurses on Substance Use Disorders and Supervised Consumption Sites" as described herein. My questions have been answered to my satisfaction, and I agree to participate in this study. I have saved or printed a copy of this form. **Moving on to the next question implies your consent.**

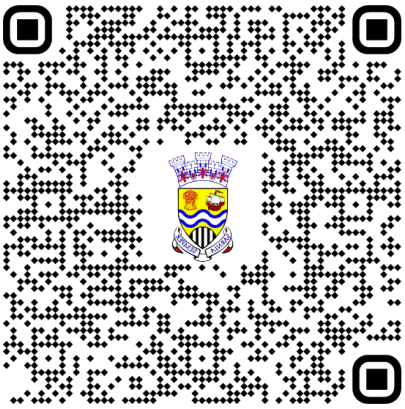
Consent to participate in research

Appendix G

Resources for Participants

Due to the nature of this study, you may experience psychological or emotional discomfort or distress in response to the questions being asked. However, these emotions are anticipated to be temporary and minimal.

Should you need any emergency services, helplines and online support, local addiction treatment services, and/or medication-assisted treatment, please follow these QR codes that will lead you to resources available near you. You may also refer to your workplace employee assistance program for additional support.



Age-friendly Sarnia-Lambton. (n.d.). *Alcohol and drug addiction assessment and treatment.* https://agefriendlysarnialambton.ca/Services/List/10095/Alcohol_and_Drug_Addiction_Assessment_and_Treatment

Erie St. Clair Health Line. (2022). *Alcohol and drug addiction assessment and treatment – Chatham – Kent.* https://www.eriestclairhealthline.ca/listServicesDetailed.aspx?id=10095&region=ChathamKent

Windsor Essex County Health Unit. (2022a, May 9). *Get help with drug, alcohol and other addictions.* https://www.wechu.org/chronic-disease/get-help-drug-alcohol-and-other-addictions

VITA AUCTORIS

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