Harm Reduction as an Approach to Ethical Nursing Care of Street-Involved People Who Use Drugs: An Integrative Literature Review

By

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Abstract

People who are street-involved and use drugs suffer from a host of physical, mental, and social harms related to homelessness and illegal drug use. Despite the great need for appropriate healthcare services, these health inequities are exacerbated by a lack of access to care that result from numerous financial, geographic, social, political, and relational barriers. The barriers posed by the stigmatizing attitudes and discriminatory behaviour of nurses is of particular concern as it violates professional ethical standards of practice and is rooted in a negative ethical climate. Harm reduction, as a guiding philosophy in nursing practice, is proposed to address these health inequities, increase access to health care, and improve the ethical climate of nursing practice. Utilizing Cooper's (1998) framework, an integrative literature review was conducted to discuss actions at the intrapersonal, interpersonal, institutional, community, and public policy level necessary to implement harm reduction in nursing practice. A Socio-Ecological framework proposed by McLeroy, Bibeau, Steckler, and Glanz (1988) served as the theoretical underpinning guiding the exploration of contextual factors that influence the adoption of harm reduction as a guiding philosophy in nursing practice. Recommendations for action that highlight the importance of a comprehensive approach, including action on the social determinants of health, to improve the health of street-involved people who use drugs are discussed.

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Harm Reduction as an Approach to Ethical Nursing Care of Street Involved People Who Use Drugs

Statement of the Problem

Street-involved people who use drugs are at a greater risk of poor health than the general population. In fact, individuals may experience increased morbidity, mortality, and disability compared to the general population as a result of a multitude of physical, mental, and social harms associated with illegal drug use and homelessness (Fast, Small, Wood, & Kerr, 2008; Fischer et al., 2005). Street-involved individuals who use drugs are in great need of appropriate health care services (Lightfoot et al., 2009). However, there exist significant financial, geographic, social, political, and relational barriers to accessing health care services for this population (Pauly, 2008a; Stevens, 1992). Of concern is the significant barrier to health care created by nurses' stigmatizing attitudes and discriminatory behaviour towards these individuals (Lovi & Barr, 2009; Pauly, 2008a; Pauly, Goldstone, McCall, Gold, & Payne, 2007). As a result of multiple barriers, existing health inequities are exacerbated by inequitable access to health care services for people who are street-involved (Pauly, 2005). For this reason, many advocate the implementation of harm reduction as a guiding philosophy in nursing practice in order to increase access to care and decrease health inequities (Canadian Nurses Association [CNA], 2011).

Basically, harm reduction is defined as "policies, programmes and practices that aim primarily to reduce the adverse health, social and economic consequences of the use of legal and illegal psychoactive drugs without necessarily reducing drug consumption." (International Harm Reduction Association [IHRA], 2010). Harm reduction is a pragmatic public health approach to drug use, encompassing a wide range of interventions, supports, and services ranging from safer use to abstinence, that aims to promote safety and prevent death and disability among those who

use drugs as well the health and safety of all members of the community (Beirness, Jesseman, Notarandrea, & Perron, 2008; CNA, 2011; Hunt et al., 2003; Pauly et al., 2007). It neither condones nor condemns drug use and emphasizes treating all those who use substances with respect, dignity, and compassion (CNA, 2011; Hilton, Thompson, Moore-Dempsey, & Janzen, 2001b; Keane, 2003).

Additionally, harm reduction covers a range of substances, including alcohol and tobacco, and has been utilized extensively in other contexts, such as drink driving campaigns and nicotine replacement therapy (Hunt et al., 2003; IHRA, 2010). Yet, it is most often associated with illegal drug use and HIV/AIDS (Hilton et al., 2001b). In this paper, the focus will be on harm reduction strategies to reduce the harms associated with illegal drug use.

Some advocate harm reduction as a component, rather than a complete approach, to reducing harms associated with street-involvement and illegal drug use (Pauly, 2008b; CNA, 2011). In this way, it is an important part of a comprehensive continuum that includes prevention, education, detoxification, treatment, follow-up, and action on the social determinants of health (Beirness et al., 2008; CNA, 2011; Pauly, 2008a).

For the purpose of this paper, street-involvement will refer to a continuum of circumstances, including absolute homelessness, precarious housing, spending a large amount of time on the street, and participating in street lifestyle activities such as prostitution and drug trafficking (Pauly, 2005; Worthington & MacLaurin, 2009).

Aims and Objectives

The purpose of this project was to identify the actions necessary at the intrapersonal, interpersonal, institutional, community, and public policy levels to promote the health of street-involved people who use drugs through the implementation of harm reduction as a guiding philosophy in nursing practice. I aim to discuss harm reduction as a viable strategy to improve

the ethical climate of nursing practice and ultimately lessen health inequities by increasing access to health care services for street-involved people who use drugs.

In this paper, I will first discuss the background that outlines the need for this integrative literature review. Second, I will explain the Ecological Model of Health Promotion as the theoretical underpinning to guide this review. According to this model, I will describe each of the five levels of influence that determine health related behaviours including intrapersonal, interpersonal processes and primary groups, institutional, community, and public policy. I will then describe Cooper's Scientific Method for Conducting Integrative Literature Reviews as the methodology. Lastly, I will report the findings and recommendations for each level of influence in order to implement harm reduction in nursing practice. I will then discuss the implications of the findings for practice and conclude with a discussion of limitations.

Background

Social Determinants of Health

Health and illness are not equally distributed in society; rather they are determined by the social and economic conditions in which people are born, grow, work, and age (Butters & Erickson, 2003; World Health Organization [WHO], 2011). In every country, differences exist in the allocation of money, power, and resources at the local, national, and global level (WHO, 2011). These structural inequalities are shaped by economic and social living conditions—known as the social determinants of health—including income and social status, social support networks, education and literacy, employment/working conditions, social and physical environments, personal health practices and coping skills, healthy child development, biology and genetic endowment, health services, gender, and culture (Public Health Agency of Canada [PHAC], 2010; Raphael, 2004).

The social determinants of health govern the quality and quantity of personal, social, and physical resources available to meet one's needs and cope with one's environment, thereby shaping health status (CNA, 2005; WHO, 2011). Health inequities are unfair and avoidable differences in health status between socioeconomic groups (Starfield, 2006; Whitehead & Dahlgren 2006; WHO, 2011). Thus, lower social and economic status, such as that experienced by street-involved people who use drugs, is inextricably associated with poor health outcomes (Butters & Erickson, 2003).

Health Inequities

As a result of disparities in the social determinants of health, many marginalized populations experience significant health inequities and a disproportionate burden of disease compared to the general population (Adelson, 2005). Fischer et al. (2005) found that illegal drug use was linked to exposure to high risk environments and social marginalization while street-involvement is associated with a host of unique risk factors for poor health (Moore, Gerdtz, & Manias, 2007). Consequently, street-involved people who use drugs are extremely vulnerable to health inequities that result from potentially remediable social structures (Pauly, 2008b). Unjust social conditions that structure poverty and homelessness contribute to a multitude of physical and mental health inequities as well as social harms among street-involved people who use drugs (Fischer et al., 2005; Pauly 2008a).

People who use illegal drugs experience a multitude of physical and mental health inequities (Fischer et al., 2005; Pauly, Goldstone, McCall, Gold, & Payne, 2007; Pauly, 2008a; Savage, Gillespie, & Lindsell, 2008). Physical harms associated with illegal drug use include injection-related infections, endocarditis, HIV/AIDS, Hepatitis B and C, compromised immunity, addiction, end-stage liver disease, and death from overdose and homicide (CNA, 2011; Fast et

al., 2008; Fischer et al., 2005; Gustafson, Goodyear, & Keough, 2008; Lightfoot et al., 2009; Kerr, Small, Moore, & Wood, 2007; Wood et al., 2005; R.A. Wood, E. Wood, Lai, Tyndall, Montaner, & Kerr, 2008; Pauly et al., 2007). Specifically, use of crack cocaine has been associated with physical harms that include cardiac and respiratory illness, unplanned pregnancies, sexually transmitted infections (STIs), dental problems, and burns to the fingers, lips, mouth, and throat (Bungay, Johnson, Varcoe, & Boyd, 2010)

In addition to physical harms, illegal drug use is associated with significant harms to mental health including a high incidence of psychiatric comorbidities, polydrug dependence, major and manic depression, anxiety, and suicide (Ben Natan, Beyil, & Neta, 2009; Fischer et al., 2005; Gustafson et al., 2008; Lovi & Barr, 2009; Savage et al., 2008). Lastly, social harms associated with illegal drug use include stigma and discrimination, social isolation, violence, criminalization, homelessness, and poverty (Fischer et al., 2005; Pauly et al., 2007; Savage et al., 2008).

The health risks associated with illegal drug use are magnified for those experiencing the effects of poverty and homelessness (CNA, 2011). While the relationship between illegal drug use and homelessness is complex, drug use is cited as both a precipitating factor and result of homelessness (Frankish, Hwang, & Quantz, 2005; Moore et al., 2007).

Homelessness involves a daily struggle to meet one's basic needs (Frankish et al., 2005). Homelessness has been associated with high rates of survival sex, STIs, and unplanned pregnancies; injuries and assaults including rape; greater risk of death, poor nutrition, tuberculosis (TB) and HIV infection; high prevalence of mental illness, substance misuse, and chronic medical conditions; and poor oral and dental health (Frankish et al., 2005; Moore et al., 2007). Street-involved people who use drugs experience serious health inequities due to the

social, economic, and health effects of street-involvement and illegal drug use (Savage et al., 2008). Thus, street-involvement is intricately linked to poor health (Moore et al., 2007).

Structural inequities that give rise to socioeconomic disadvantage among street-involved people who use drugs result in significant physical and mental health inequities as well as social harms. Yet, despite a great need for appropriate health care services, these individuals experience multiple barriers to accessing adequate health care services.

Inequitable Access to Health Care

The "primary objective of Canadian Health Policy is to protect, promote, and restore the physical and mental well-being of residents of Canada and to facilitate reasonable access to health services without financial or other barriers" (Health Canada, 1985, c.6, s.3). For this reason, The Canada Health Act (1984) cites accessibility as one of five principles fundamental to Canada's health care system (Health Canada, 2001). Access refers both to the availability of health care services as well as the delivery of services at the point of care (McGibbon, Etowa, & MacPherson, 2008). Access to health care is so strongly linked to health outcomes that it comprises a single determinant of health (Pauly, 2008b; PHAC, 2010).

Despite the federal mandate to promote the physical and mental health of all Canadians while ensuring access and removing barriers, street-involved people who use drugs continue to face numerous financial, geographic, social, political, and relational barriers to adequate health care services (Butters & Erickson, 2003; Pauly, 2008b; Stevens, 1992). Pauly, Varcoe, and MacKinnon (2009) argue that street-involved people who use drugs experience inequitable access to health care for a variety of complex reasons including stigma related to illegal drug use and street-involvement, criminalization of drug use, discourses of blame and personal responsibility, poverty, and lack of system capacity.

In Canada, the cost of lost or stolen health cards, transportation, child care, pharmaceuticals, and uncovered services such as eye and dental care, are financial barriers to accessing health care for individuals living in poverty (Frankish et al., 2005; Hwang & Gottlieb, 1999; Williamson & Fast, 1998). For those without social assistance, the cost of basic medical coverage and obtaining a health card can preclude access (Butters & Erickson, 2003).

Geographic barriers exist for individuals that are not within walking distance of healthcare centres (Pauly, 2008b). Additional barriers result because many street-involved individuals are too ill to seek care, do not know where to access care, are unable to make or keep appointments, believe they are ineligible for health care services, lack continuity of care as a result of transience, and face competing priorities such as shelter, food, and addiction (Barkin, Balkrishnan, Manuel, Andersen, & Gelberg, 2003; Gelberg, Gallagher, Andersen, & Koegel, 1997; Hatton, 2001; Lewis, Andersen, & Gelberg, 2003).

Relational barriers to accessing health care services include both the nature of the interaction with the health care provider, as well as one's perception of the interaction (Stevens, 1992). For this reason, stigma and discrimination associated with drug use, homelessness, and poverty can result in decreased quality of care and negative interactions between patients and health care providers (Pauly, 2008b; Pauly et al., 2007). From the perspective of those receiving care, negative attitudes, judgements, and discrimination from health care providers serve as primary relational barriers to accessing health care (Butters & Erickson, 2003). In fact, status as a current or past "drug user" in itself can affect the quality of care and cause reluctance to access health care services (Butters & Erickson, 2003).

Street-involved individuals who use drugs experience a greater risk of health inequities which are made worse by a host of barriers to accessing health care services (Pauly, 2005).

According to the inverse care law, those with the greatest health needs often have the least access to care (Hart, 1971). Consequently, these individuals often experience very poor mental and physical health and well-being because they have few resources to cope with their health needs (Pauly, 2008b).

Stigma and Discrimination as a Relational Barrier to Health Care

Street-involved individuals who use drugs experience inequitable access to health care as a result of multiple barriers. Stigma and discrimination associated with illegal drug use and street-involvement creates a relational barrier to accessing to health care services (Butters & Erickson, 2003; CNA, 2011). Consequently, pervasive negative attitudes and behaviours of nurses towards street-involved individuals who use drugs act as a significant barrier to accessing health care services that results in negative health outcomes (Butters & Erickson, 2003; CNA, 2011; Lovi & Barr, 2009; Pauly, 2008b; Pauly et al., 2007; Peckover & Chidlaw, 2007).

Stigma is defined as "circumstances when one identifies and labels differences in others and forms a negative stereotype about the members of that particular group" (Lovi & Barr, 2009, p. 167). Stigma results in social devaluing, spoiled identities, social isolation, and active discrimination when negative beliefs are internalized (CNA, 2011).

Prevailing negative attitudes and behaviours of nurses towards street-involved individuals who use drugs is not an isolated problem characterized by errant individuals. Rather, these values and beliefs are shaped and reinforced by broader legal, political, and organizational processes (Rodney, Pauly, & Burgess, 2004; Pauly et al., 2007). Pauly et al. (2007) argue that dominant societal values related to illegal drug use, the historical response to drug use and people who use drugs, as well as the current prohibitionary legal approach to drug consumption has a profound influence on the culture of health care delivery.

First of all, Pauly et al. (2007) argue that our historical context plays a key role in the development of dominant values, laws, and policies on drug use. Some argue that, historically, certain drugs have been labeled immoral and consequently criminalized based on the economic and social marginalisation of populations that used them. In this way, stigma and discrimination associated with drug use is rooted in societies' experience and response to people who use psychoactive substances such as tobacco, alcohol, and drugs (2007).

Similarly, the context and culture of health care informs social norms and policies and plays a key role in the development of nurses' attitudes, stereotypes, and judgements of social attributes (CNA, 2011; Pauly, 2008a). Pauly et al. (2007) argue that negative organizational values characterized by judgement towards street-involved individuals who use drugs can contribute to a moral climate that fosters stigma and discrimination towards these individuals.

Without knowledge of the historical context and values underlying the culture of healthcare, nurses may uncritically internalize negative discourses of blame, personal responsibility, and immorality related to illegal drug use (Pauly, MacKinnon, & Varcoe, 2009; Pauly et al., 2007). For this reason, individuals who use illegal drugs are often viewed as disruptive, dangerous, lacking skills, defective, and having a weak character and personality malfunction (Ben Natan et al., 2009; Lovi & Barr, 2009; Peckover & Chidlaw, 2007). The delivery of health care can be adversely affected when nurses work in a negative ethical climate as it hinders development of the nurse-patient relationship, may result in punitive treatment towards those who use drugs, and results in missed opportunities to address the underlying social conditions that contribute to poor health status (Pauly et al., 2007)

Macdonald (2003) explains that patients who use drugs are often labelled 'difficult' by nurses. Difficult is a stigmatizing term that implies a demanding, frustrating, time consuming,

manipulative, and unreasonable patient. Patients with certain personal characteristics that conflict with nurses' internalized social attitudes, beliefs, and values, may be viewed negatively and discriminated against. Additionally, those who are judged to be of lower social and moral worth, not a positive contributor to society, and to be at fault for their diagnoses, such as HIV/AIDS, are often viewed negatively (2003). Street-involved individuals who use drugs are among those negatively labelled by nurses (Pauly, 2008a), resulting in value judgements and discrimination (MacDonald, 2003).

Much literature reports prevailing stigmatising attitudes of nurses towards individuals with substance dependency (Ben Natan et al., 2009; CNA, 2011; Lovi & Barr, 2009; Kelleher, 2007; Peckover & Chidlaw, 2007). Ben Natan et al. (2009) found that nurses experience significant difficulties caring for patients who use drugs. In the same way, Happell and Taylor (2001) found that many nurses employed in general healthcare settings considered providing care to clients with problematic substance use to be a difficult and unpleasant experience. Ford, Bammer, and Becker (2009) found that many nurses felt exhausted, vulnerable, and a sense of compromised safety when providing care to individuals with problematic substance use. Evidently, negative judgements towards street-involved people who use drugs are prevalent amongst nurses.

Negative attitudes shape the quality of care and interactions between nurses and street-involved people who use drugs. Nurses have been found to exhibit behaviours such as withholding treatment, delaying care, avoiding patients, performing inaccurate assessments, roughness, and providing less information to individuals with substance dependency (Carveth, 1995; Corley & Goren, 1998; Johnson & Webb, 1995; Stevens, 1992). Pauly (2008a) explains that stigmatizing experiences and discrimination at the point of care can result in feelings of

worthlessness, depression, isolation, anger, anxiety and fear among street-involved individuals who use drugs. As a result of these negative encounters, individuals may delay or avoid accessing care in the future (Pauly, 2008a). Additionally, one study found that stigmatizing encounters and social exclusion lead to the development of risky relationships with peers, unsafe injection practices, and unwillingness to disclose drug-related health issues among people who inject drugs (Jackson, Parker, Dykeman, Gahagan, & Karabanow, 2010).

In short, the historical context of drug consumption and culture of health care play a key role in the development of nurses' beliefs and attitudes towards street-involved people who use drugs. These negative attitudes and judgements manifest in discrimination and act as a powerful relational barrier to accessing health care services (Pauly, 2008a). The relational barriers that exist between nurses and this marginalized population are of particular concern as they violate ethical and professional standards of practice.

Ethical Standards of Nursing Practice

According to the CNA's Code of Ethics for Registered Nurses (2008), Canadian Registered Nurses have a responsibility to practice according to a set of nursing values and ethical responsibilities; to provide safe, compassionate, competent and ethical care; promote health and wellbeing; promote and respect informed decision-making; preserve dignity; maintain privacy and confidentiality; promote justice; and maintain accountability (CNA, 2008).

Registered nurses have a professional ethical responsibility to provide care on the basis of need and avoid discrimination based on socioeconomic status, health status, lifestyle, or culture (CNA, 2008; Pauly, 2008a). They are to refrain from judging, labelling, and stigmatizing behaviours and are required to intervene when others fail to respect the dignity of a patient, recognizing that to be silent is to condone the behaviour. Registered Nurses are to uphold

principles of social justice and intervene when working conditions affect their ability to provide safe, compassionate, competent, and ethical care (CNA, 2008).

Accordingly, stigmatising attitudes and discriminating behaviours demonstrated by a large number of nurses towards street-involved individuals who use drugs are inconsistent with professional ethical standards of practice (Pauly et al., 2007; Pauly, 2008a). Yet, many authors argue that nurses have limited resources, experience, and understanding necessary to provide ethical care (Ben Natan et al., 2009; Happell & Taylor, 2001; Moore et al., 2007; Peckover & Chidlaw, 2007; Rassool, 2008).

Conditions that Impede Ethical Nursing Practice

Nursing practice environments have the resources and organizational structures necessary to ensure safety, support, and respect for all those in that setting (CNA, 2008). Accordingly, Rodney, Brown, and Liaschenko (2004) assert that nurses' ability to enact their moral agency is influenced by context—that is, institutional and organizational structures as well as social and cultural backgrounds (Johnson, 2004). Furthermore, the CNA (2008) states that nurses' ability to engage in ethical practice is the result of decisions made at the micro, meso, and macro level. For this reason, practice environments, institutions, and policy makers have a significant influence on whether nurses are able to uphold ethical standards of practice (CNA, 2011). Decisions made at every level of health care—including individual, organizational, regional, provincial, and national— regarding the care of street-involved people who use drugs affect nurses' ability and opportunity to develop the knowledge, attitudes, and skills necessary to provide ethical nursing care.

Harm Reduction

Many advocate the implementation of harm reduction as a guiding philosophy in nursing practice to increase access to care and decrease health inequities for those who use drugs (CNA, 2011). Harm reduction is based on principles of pragmatism and humanistic values as well as a commitment to public health and human rights (Beirness et al., 2008; CNA, 2011; IHRA, 2010; Pauly, 2008a). Key principles commonly associated with harm reduction include prioritizing individuals' immediate needs; focusing on harms rather than the extent of drug use; developing policies and programs that are cost effective and based on the best evidence; valuing incremental changes; challenging harmful policies and practices; and involving people who use drugs in decisions concerning policy and program development (Beirness et al., 2008; CNA, 2011; Hunt et al., 2003; IHRA, 2010).

Implicit in the harm reduction philosophy is the acknowledgment that drug use is associated with a wide range of social, economic, and health related harms such as high rates of HIV and Hepatitis C (HCV), infections, overdose, addiction, criminalization, violence, stigma, and discrimination (Hunt et al., 2003; Lightfoot et al., 2009). Furthermore, harm reduction is founded on the belief that drug use is an enduring feature of human societies, and despite criminalization and harms associated with use, countless individuals cannot or will not stop using drugs (Einstein, 2007; Hunt et al., 2003). Therefore, harm reduction interventions must be in place to minimize the health, social, and economic harms to individuals, the community, and society, in light of continued drug use (Beirness et al., 2008; Hunt et al., 2003).

The evidence to support the efficacy of harm reduction as an approach to the care of street-involved people who use drugs has been well established (Pauly et al., 2007). Moreover, a number of comprehensive literature reviews have demonstrated the efficacy of harm reduction

strategies to promote the health of street-involved people who use drugs by increasing access to health care services, reducing the transmission of blood-borne pathogens, and facilitating the development of therapeutic relationships between those who use drugs and health care providers (Beirness et al., 2008; CNA, 2011; Hilton et al., 2001b; Hunt et al., 2003; Ritter & Cameron, 2006).

Harm Reduction as an Approach to Ethical Nursing Practice

Nurses have been instrumental in the development and implementation of harm reduction services across the globe, in activities ranging from research to advocacy (Pauly & Goldstone, 2008). Currently, nurses are involved in frontline, administrative, and educator roles in street outreach, inner city health care centres, needle exchange programs, heroin prescription trials, methadone clinics, supervised injection facilities, maternal-child care, and drug policy reform (Pauly & Goldstone, 2008). Nurses working in harm reduction conduct research; deliver education to nurses and students; raise awareness among the public; and offer counselling, referrals, treatment and education to those who use drugs (Wood, Zettel, & Stewart, 2003). As nurses are often the first contact in health care for the many individuals who use drugs, Pauly and Goldstone (2008) identify a need to increase the reach of harm reduction in nursing practice in order to enhance trust and access to health care.

There is much support for harm reduction as a guiding philosophy to promote ethical nursing practice and increase access to health care for street-involved people who use drugs (CNA, 2011; Lightfoot et al., 2009; Pauly et al., 2007; Pauly 2008a; Pauly, 2008b; Wood & Stewart, 2003; Wood, Zettel, & Stewart, 2003). Harm reduction is recommended as an approach to nursing care of street-involved people who use drugs because it is consistent with professional ethical standards of nursing practice and evidence-based practice; it has potential to improve the

ethical climate of nursing practice; and it provides a context to enhance trust and access to health care.

Harm reduction is consistent with, and endorsed by, the College of Registered Nurses of British Columbia "Professional Standards" and the Canadian Nurses Association's "Code of Ethics for Registered Nurses" (CNA, 2011; Lightfoot et al., 2009; Pauly et al., 2007; Wood & Stewart, 2003). Moreover, the values of harm reduction are consistent with the following nursing values: the provision of safe, ethical, competent, and compassionate nursing care; the promotion of health and well-being; the promotion of and respect for informed decision-making; the preservation of dignity; and the promotion of justice (CNA, 2011; Lightfoot et al., 2009; Pauly et al., 2007). Secondly, nurses have a responsibility to practice according to the best available evidence. The current evidence base for harm reduction identifies its efficacy in promoting the health and well-being of those who use drugs (CNA, 2011; Lightfoot, 2009)

Pauly (2008b) identifies the potential of harm reduction as a guiding philosophy in nursing practice to shift the moral context of health care delivery to a non-judgemental approach that values individuals' moral worth and views those who use drugs as deserving of care despite multiple constraints. For this reason, harm reduction in nursing practice has the potential to foster trust and increase access to health care for street-involved people who use drugs (Pauly, 2008a).

Harm reduction as a guiding philosophy in nursing practice with street-involved people who use drugs has the potential to increase access to health care, decrease health inequities, promote trust and the development of therapeutic relationships between those who use drugs and health care providers, improve the moral climate of nursing practice, and promote professional nursing practice through adherence to the ethical standards of practice and evidence-based

practice. However, to promote health through the implementation of harm reduction as a guiding philosophy in nursing practice, there must be changes to each level of the social environment.

Ecological Model of Health Promotion

The Ecological Model of Health Promotion proposed by McLeroy, Bibeau, Steckler, and Glanz (1988) served as the theoretical perspective guiding this study. According to this model, a host of individual and social environmental factors determine health related behaviours (McLeroy et al., 1988). This perspective counters a primary focus on individual lifestyle choices and emphasizes the social influences on health and disease. From an ecological perspective, making changes to the physical and social environments that serve to maintain and reinforce behaviours, will produce changes in individual behaviour. For this reason, lifestyle interventions should be secondary to environmental approaches (McLeroy et al., 1988).

According to the Ecological Model, the following five levels of influence determine health related behaviours and reflect the current range of strategies to promote health: intrapersonal, interpersonal processes and primary groups, institutional, community, and public policy.

Intrapersonal

Individual characteristics such as developmental history, knowledge, attitudes, behaviour, self-concept, and skills influence health related behaviours. Health promotion interventions should be targeted at modifying these characteristics through educational programs, mass media, support groups, organizational incentives, and peer counselling (Mcleroy et al., 1988).

Interpersonal Processes and Primary Groups

Formal and informal social network and support systems such as family, friends, neighbours, acquaintances, and coworkers influence individuals' health related behaviour through the provision of support and resources. Health promotion interventions should aim to

modify the social influences that encourage and maintain unhealthy behaviours (McLeroy et al., 1988).

Institutional

Social institutions such as professional organizations, health care institutions, work settings, and educational institutions can influence health through the provision of economic and social resources and transmission of social norms and values. Health related behaviour can be supported through changes to organizational characteristics including regulations and policy (McLeroy et al., 1988).

Community

A wide ranging concept that includes: primary groups to which individuals belong such as family, friends, and neighbourhoods; relationships among organizations and groups in an area such as health care providers, schools, and agencies; and geographical and political populations. Communities influence health through social relationships, identity, and resources. Health promotion interventions should be targeted at strengthening access to political and power structures by marginalized groups; promoting interagency collaboration; and utilizing mediating structures, such as churches and informal social networks, to deliver services (McLeroy et al., 1988).

Public Policy

The last level of influence includes local, provincial and national laws and policies. These policies aim to protect the health of the community through regulatory laws and procedures. Accordingly, health promotion interventions target policy development, advocacy, and analysis (McLeroy et al., 1988).

Ecological Model of Health Promotion in the Integrative Literature Review

Drawing on the Ecological Model of Health Promotion allowed me to recognize and analyze the influence of contextual factors on a wide range of health related behaviours and health promoting interventions. In this way, the health of street-involved people who use drugs, as well as the implementation of harm reduction in practice, is largely determined by individual characteristics, social networks, the culture of healthcare, and institutional policies. From an ecological perspective, I will propose recommendations targeted at the five levels of influence to enact change and promote the implementation of harm reduction in nursing practice (McLeroy et al., 1988).

Methodological Approach

Cooper's Scientific Method for Conducting Integrative Literature Reviews

Whittemore and Knafl (2005) state that an integrative review is "a specific review method that summarizes past empirical or theoretical literature to provide a more comprehensive understanding of a particular phenomenon or healthcare problem" (p. 546). This method allows analysis of a variety of methodological approaches and has the capacity to contribute to nursing science and influence policy and practice (Whittemore & Knafl, 2005). The intent of this integrative literature review is to determine recommendations at the intrapersonal, interpersonal, institutional, community, and public policy level to promote the health of street-involved people who use drugs and ethical nursing practice through the implementation of harm reduction as a guiding philosophy in nursing practice.

To conduct the review, I utilized Cooper's (1998) scientific guidelines for conducting integrative literature reviews with Whittemore and Knafl's (2005) updated methodology. Cooper (1998) outlines five steps to conduct an integrative literature review: 1) problem

formulation; 2) data collection; 3) evaluation of data; 4) data analysis; 5) interpretation and presentation.

Problem formulation.

In the problem formulation stage, a clear problem identification and purpose for the review provide the focus and boundaries for the integrative review process. In this stage, the variables of interest and sampling frame are identified (Whittemore & Knafl, 2005). The specific research question I sought to answer was: *What actions would promote harm reduction as a strategy to reduce health inequities for street-involved people who use drugs?* To achieve this, I identified the variables of interest: *street-involved people who use drugs* as the population, *harm reduction* and *ethical nursing practice* as concepts, and *inequitable access to health care* and *health inequities* as the health care problems. I developed conceptual and operational definitions for each variable of interest in order to focus my review and extract appropriate data from the literature (See Appendix A) (Cooper; 1998; Whittemore & Knafl, 2005).

Kirkevold (1997) explains that inclusion of diverse primary sources, including empirical and theoretical literature, contributes to a more comprehensive understanding of the phenomenon of interest. However, data evaluation becomes more complex (Whittemore & Knafl, 2005). Additionally, Whittemore and Knafl (2005) explain that there is limited discussion of the issues in rigour inherent in combining theoretical literature and empirical research in an integrative literature. For this reason, I decided to include empirical studies from the last ten years in my sampling frame and exclude theoretical reports.

Data collection.

The second step, data collection, involves a well-defined literature search that should include all relevant literature on the topic and involve at least two search strategies (Whittemore

& Knafl, 2005). I conducted a literature search using four electronic databases, PubMed, MEDLINE, Google Scholar, and the Cumulative Index to Nursing and Allied Health Literature (CINAHL). I limited the search results to the last ten years, specifically 2001- 2011, and utilized the following search terms; *ethics, stigma, nursing practice, nursing, homelessness, street-involved, injection drug use, substance use(r), illicit drug use, illegal drug use, harm reduction, harm minimization, nurse-patient relations,* and *nurse attitudes*.

This literature search rendered fifty-three articles. To ensure thoroughness, I obtained seven articles through ancestry searching and one article from a recommendation by my supervisory committee (Conn et al., 2003). I limited the results to peer-reviewed articles published in English (Krainovich-Miller & Cameron, 2009). Of the sixty-one eligible articles, twenty-six articles were rejected because of lack of relevancy to the research question, one was rejected because it was not published in English, four were rejected because they were not peer-reviewed, and fifteen were rejected because they were not empirical research articles. This process resulted in fifteen eligible articles, eight qualitative and seven quantitative research studies. The empirical reports included a wide variety of methodologies ranging from ethnography, phenomenology, case study, correlational, and cross-sectional designs, to name a few.

Data evaluation.

The third step, data evaluation, involves the critical appraisal of the literature in order to determine reliability and possible exclusion (Cooper, 1998). Whittemore and Knafl (2005) recommend that data evaluation of a wide variety of methodologies is addressed in a meaningful way. As my sampling frame included diverse empirical methodologies, I developed two instruments to appraise qualitative and quantitative primary sources. I utilized Beck's criteria for

"Critiquing Qualitative Research" (2009) and Heerman, Craft, and Singh's "Critiquing Quantitative Research" (2009) (See Appendix B and C). I chose these frameworks because they both provide a current, thorough, and systematic method to critically appraise each aspect of a study. Moreover, both frameworks were developed to strengthen the relationship between nursing research and evidence-based practice by credible advanced practice nurse researchers with a wealth of research experience and numerous publications.

Using these tools, I appraised the fifteen empirical sources and assigned each article a quality score out of twenty points based on methodological rigour and data relevance (See Appendix D). A score of less than 10 was used to indicate exclusion or less contribution in the data analysis stage (Whittemore & Knafl, 2005). Based on the quality scores, no articles were excluded.

Data analysis.

Following this, data analysis involved ordering, coding, and categorizing data to formulate a synthesis and conclusion about the original problem (Cooper, 1998). To carry out this step, I utilized the constant comparison method proposed by Whittemore and Knafl (2005). The constant comparison method involved the organization of data into systematic categories to facilitate the recognition of patterns, themes, and relationships. This method took place through a number of substeps; data reduction, data display, data comparison, conclusion drawing and verification (Whittemore & Knafl, 2005).

In the first step, data reduction, I created an overall classification system based on my research question and theoretical perspective to manage the data and facilitate analysis. First of all, I developed a classification system based on McLeroy et al.'s (1988) Ecological Model of Health Promotion including the following categories: intrapersonal, interpersonal, institutional,

community, and public policy recommendations. Then, I extracted relevant data from each source onto a one page document in order to simplify and focus the data (Whittemore & Knafl, 2005). Following this, I classified and organized the data from each article into the categories. This allowed concise organization of the literature to systematically compare each sources' recommendations for implementation of harm reduction in nursing practice.

In the second step, data display, I organized the extracted data into the classification system using a colour-coded system. Specifically, on each one page document I colour coded the data based on the level of recommendations. For example, purple indicated a community level recommendation. Whittemore and Knafl (2005) assert that these displays allow for an enhanced visualization of patterns and themes across sources and serve as the first step to interpretation.

In the third step, data comparison, I systematically compared the data item by item to identify themes, patterns, and relationships. I kept notes in order to organize and keep track of the emerging themes and patterns. By systematically comparing the data, I further organized the classification system groups into more specific subgroups. For example, undergraduate and professional education emerged as a theme under institutional recommendations. Then, I critically compared extracted data to identify higher-order clusters such as contrasting data, comparisons, and similar and unusual patterns (Whittemore & Knafl, 2005). As a result, complex relationships were identified, such as the relationship between role support and education.

Lastly, I completed the final step of data analysis, conclusion drawing and verification. This step involved moving beyond the identification of relationships and patterns to higher levels of abstraction in order to draw conclusions. In this step, I synthesised the findings from each

subgroup and developed an integrated summation of the recommendations to implement harm reduction in nursing practice (Whittemore & Knafl, 2005).

Interpretation and presentation.

The final step of Cooper's guidelines, interpretation and presentation, concludes with a written report and an oral presentation. Ultimately, this report should contribute to a deeper knowledge base of the phenomena of concern and provide recommendations for policy and practice (Whittemore & Knafl, 2005). Accordingly, in this integrative literature review a comprehensive analysis of harm reduction in nursing practice to promote health of street-involved people who use drugs and harm reduction is presented. It concludes with recommendations at the intrapersonal, interpersonal, institutional, community, and public policy levels to enhance the health of street-involved people who use drugs and ethical nursing practice through the implementation of harm reduction as a guiding philosophy in nursing practice

Findings

According to the Ecological Model of Health Promotion, health related behaviour is determined by a wide range of individual and social environmental factors (McLeroy et al., 1988). Accordingly, the implementation of harm reduction in nursing practice to promote the health of street-involved people who use drugs is determined by factors at the intrapersonal, interpersonal, institutional, community, and public policy level.

Intrapersonal

At the intrapersonal level, interventions are targeted at characteristics of individuals (McLeroy et al., 1988). As discussed, nurses' negative attitudes, inadequate knowledge base, and lack of skills in relation to the care of those who are street-involved and using drugs act as a significant barrier to accessing health care for those who use drugs. In order to promote the

health of such individuals, nurses' knowledge, attitudes, and skills related to substance use, street-involvement, and harm reduction become targets of intervention.

Respectful language.

First of all, researchers advise nurses to be aware of using value-laden language that marginalizes individuals based on drug use. Use of terms such as "IVDU", "addict", and "junkie" communicates judgement and perpetuates a negative ethical climate in practice. They argue that a move to more respectful language in research and practice is necessary to achieve a change in attitudes (Peckover & Chidlaw, 2007).

Adhere to professional standards of practice.

Secondly, several nurse researchers recommend that nurses practice according to professional ethical standards of practice and best evidence available by incorporating harm reduction strategies in practice and acting as patient advocates (Lovi & Barr, 2009; Pauly, 2008a). Lovi and Barr (2009) recommend that nurses adhere to professional ethical standards of practice by acting as advocates for their patients who use drugs. They recommend that nurses refrain from discriminating behaviours towards patients and immediately address signs of stigma by intervening and reporting instances when a patient's dignity is not upheld (2009).

Shift values in practice.

To practice according to principles of harm reduction, Pauly (2008a) recommends organizational adoption of harm reduction to shift the cultural norms in health care, specifically "from an ideology of fixing to reducing harm, from stigma to moral worth, and personal responsibility to enhancing the decision making capacity" (pp. 1). However, she highlights the need for policy reform to support harm reduction in practice as necessary to foster a shift in nurses' values (2008a).

Utilize a framework of non-judgemental care.

Several studies document how existing nurse-delivered programs grounded in a harm reduction philosophy increase access to health care through a non-judgemental approach to nursing care. In two evaluations of the Vancouver Street Nurse Program, Hilton, Thompson, Moore-Dempsey, and Hutchinson (2001a) and Hilton, Thompson, & Moore-Dempsey (2009) outline the success of a framework of non-judgemental care, trust, and respect to their marginalized street-involved patients to develop therapeutic relationships, decrease risk behaviour, and promote well-being. Furthermore, they found that setting mutual goals and developing consensual plans with clients while moving at the client's pace allowed them to establish and maintain contact with those who had become distrustful of health care services (2001). Limbu (2008) describes a similar community-based outreach program in Myanmar where nurses act as non-judgemental advocates for those who use drugs, resulting in unique access to, and trust from, those who use drugs.

Interpersonal processes and primary groups

At the interpersonal level, interventions are targeted at informal and formal social networks, support systems, coworkers, and work groups in order to modify the social influences that encourage and maintain behaviours (McLeroy et al., 1988).

Influence colleagues.

Hilton et al. (2001a) describe how the nurses working in the Vancouver Street Nurse Program influence colleagues to be responsive through education and presentations on the principles of harm reduction, opportunities for health care providers to observe outreach, provision of consultation services, and education sessions for nurses from other communities. Similarly, Lovi and Barr (2009) recommend that nurses influence colleagues by acting as role

models. By addressing stigma and reporting unethical practice, they argue that nurses will learn that discriminatory attitudes towards those who use drugs will not be tolerated in practice.

Institutional

At the institutional level, interventions are targeted at modifying characteristics of professional organizations, health care institutions, work settings, and educational institutions that influence health through the provision of economic and social resources and transmission of social norms and values (McLeroy et al., 1988). Many argue that action on institutional regulations and policies is key to the implementation of harm reduction as a guiding philosophy in nursing practice.

Undergraduate and continuing professional education.

As a result of institutional structures and healthcare policies, many authors argue that nurses have limited resources, experience, and understanding necessary to provide ethical care to street-involved people who use drugs (Ben Natan et al., 2009; Ford et al., 2009; Happell & Taylor, 2001). Current research has demonstrated that nurses receive inadequate education related to substance dependency as well as a lack of support from management, policy, and professional standards (Ford et al., 2009; Lovi & Barr, 2009; Rassool & Rawaf, 2008).

Much literature has identified the lack of drug and alcohol education as a barrier to the provision of quality care for those who use drugs. Many argue that issues surrounding substance dependency and nursing care are inadequately addressed in the undergraduate nursing curriculum and continuing education in practice (Ford et al., 2009; Happell & Taylor, 2001; Lovi & Barr, 2009; Peckover & Chidlaw, 2007; Rassool & Rawaf, 2008). Additionally, Rassool and Oyefeso (2007) argue that there is a lack of clinical experience in the field of addictions in the undergraduate nursing degree. This is problematic because some argue education is necessary to

enhance nurses' understanding of the social and health issues related to substance use, attitudes towards those who use drugs, and ultimately, patient care (Rassool & Oyefeso, 2007; Rassool & Rawaf, 2008).

Secondly, several authors identify the need for workplace education in order to improve practicing nurses' skills, attitudes, and knowledge surrounding patients who use substances (Ben Natan et al., 2009; Ford et al., 2009; Happell & Taylor, 2001; Peckover & Chidlaw, 2007; Rassool & Oyefeso, 2007; Rassool & Rawaf, 2008). Yet, Ford et al. (2009) found that education was only effective in improving nurses' therapeutic attitudes with a high level of role support. Despite this need, there remains a lack of support from management, policy, and professional standards for nurses working with patients with substance dependency (Ford et al., 2009).

In a study to evaluate the effectiveness of a drug and alcohol education programme in the undergraduate nursing degree, Rassool and Rawaf (2008) found an increase in nursing students' knowledge, improved attitudes towards those with substance dependency, and enhanced confidence providing intervention. Similarly, from their research on stigma towards those who use drugs in nursing practice, Lovi and Barr (2009) recommend drug dependency education and clinical placements in the undergraduate nursing degree to enhance nurses' attitudes and skills.

Advocates of education in the undergraduate degree agree that in order to be effective, drug and alcohol education must be integrated into the curriculum (Rassool & Rawaf, 2008). Yet, Happell and Taylor (2001) explain that substance dependency education does not compete well as a priority in the undergraduate nursing education curricula. For this reason, many propose continuing professional education as an alternative solution to enhance nurses' knowledge base, attitudes, and skills related to those who are street-involved and use drugs (Ben Natan et al., 2009; Ford et al., 2009; Gustafson et al., 2008; Happell & Taylor, 2001; Lovi &

Barr, 2009). Some researchers recommend that nurse educators collaborate with those who use drugs to deliver education to nurses in the workplace in order to enhance professional awareness of harm reduction and discuss current issues in health care affecting those who are street-involved and using drugs (Ben Natan et al., 2009; Gustafson et al., 2008).

Yet, education should do more than address nurses' attitudes, knowledge, and skills related to substance dependency and harm reduction. As harm reduction does nothing to address the underlying conditions that contribute to health inequities, Pauly (2008a) argues that there is a need to enhance nurses' knowledge of the social conditions that influence health.

Role support.

While there is much agreement that drug and alcohol education for nurses is lacking, this education may not be enough to change nursing practice. In fact, recent research has demonstrated that education is not enough to change attitudes; rather clinical performance is a product of both education and support (Lovi & Barr, 2009; Ford et al., 2009; Pauly, 2008a).

In a study to evaluate the effectiveness of workplace drug and alcohol education, Ford et al. (2009) found education in itself had no effect on nurses' attitudes. They found that nurses were only able to transfer their knowledge and skills into practice in a supportive work environment where someone was available to provide support and feedback, and assist them with issues related to patient care. For this reason, institutions involved in nursing workforce development should implement strategies that provide role support for nurses providing care to those with substance dependency (2009).

In a similar vein, Happell and Taylor (2001) propose the implementation of a drug and alcohol nursing liaison service in a general hospital environment has the potential to assist nurses providing care to those who use drugs. They suggest that the presence of such a service may

legitimize and bring to light the issues surrounding the care of those with substance dependency (2001).

Structural supports.

To enhance ethical nursing practice and improve the health of those who are street-involved and use drugs, Pauly (2008a) recommends that health care institutions modify current policies and services to incorporate a harm reduction policy. Similarly, Gustafson et al. (2008) recommend that institutions enable public health nurses to collaborate with correctional facilities, hospitals, clinics, and street outreach programmes to deliver harm reduction strategies to those who use drugs. Additionally, many argue that structural supports grounded in best evidence and a harm reduction philosophy such as needle exchange programmes, supervised injection facilities, low barrier HIV and HCV testing, nurse-delivered safer injection education, street outreach, peer-led outreach, and methadone maintenance therapy should be established by healthcare institutions to promote the health of those who use drugs (Fast et al., 2008; Gustafson et al., 2008; Hilton et al., 2001a; Limbu, 2008; Wood et al., 2005; Wood et al., 2008).

However, Pauly (2008a) argues that harm reduction policies and strategies alone do not address the underlying conditions that contribute to health inequities. For this reason, these strategies should be implemented in health care with action on the social determinants of health. Harm reduction should comprise one aspect of a comprehensive approach to reducing the harms associated with drug use and homelessness (2008a)

Nursing leadership.

Several nurse researchers advocate for effective nursing leadership positions and an interdisciplinary model of care to improve the ethical climate of practice and increase access to care for those who use drugs. Pauly (2008a) found that ethical nursing practice is enhanced

when nurses work as part of an interdisciplinary team in a supportive work environment with strong nursing leadership. Limbu (2008) recommends that nurses collaborate with peers and other health care providers, such as social workers and physicians, to increase access to comprehensive care.

Community

Changes to community groups should target social relationships, identity, and resources in order to promote health (McLeroy et al., 1988). At the community level, researchers propose action within the community of nurses as well as those who use drugs.

Nursing research.

Some suggest that nurses should engage in research to provide leadership on issues related to the health of those who use drugs and to promote the implementation of harm reduction strategies in nursing practice. Limbu (2008) points out that nurses are in a position to inform evidence-based best practices and policies by conducting research on harm reduction strategies and challenges. In this way, nursing researchers can conduct research to evaluate the effectiveness of harm reduction strategies and prepare summary reports on the health needs of street-involved people who use drugs in order to influence the planning, development, and evaluation of healthcare programs and services (Gustafson et al., 2008). Additionally, Gustafson et al. (2008) promote collaborative community-based research as a means to provide a voice to marginalized populations and advocate for health services.

Nursing advocacy.

Some argue that advocacy in practice can raise awareness of the influence of broader social conditions, policy, and social structures that influence health and substance use. Lovi and Barr (2009) identify advocacy as a professional and ethical responsibility in nursing practice.

Accordingly, Pauly, (2008a) recommends nurses raise awareness of the broad range of harms that result from drug use, policy, and social structures. She argues that nurses can play a key role in highlighting the broad range of harms associated with drug use and homelessness into harm reduction and drug policy debates (2008a).

Public Policy

At the public policy level, health promotion interventions target the development and analysis of policy and law at the local, provincial, and national level (McLeroy et al., 1988). Much research advocates for health policy reform to address the underlying social conditions that contribute to poor health and further marginalization of street-involved people who use drugs.

Health policy reform.

While harm reduction strategies are an important aspect of lessening the harms associated with drug use, they are insufficient to address the underlying social conditions that contribute to health inequities and inequitable access to health care among street-involved people who use drugs (Pauly, 2008a**)**. To address these inequities, health and social public policy must take action on the social determinants of health. Accordingly, attention must be paid to the underlying conditions that structure many of the harms of drug use including homelessness, poverty, unemployment, a lack of quality housing, social support, and education (2008a).

Limitations

This integrative literature reviewed incorporated data from fifteen empirical sources in the form of quantitative and qualitative research. I evaluated each source using a quality appraisal tool and resultantly identified several limitations across qualitative and quantitative reports (See Appendix E).

Several quantitative research articles contained threats to both internal and external validity (Lobiondo-Wood & Singh, 2009). The issue of selection bias was present in a number of quantitative research reports. Wood et al. (2005) and Wood et al. (2008), acknowledge the issue of selection bias as a result of using a convenience sample of people who use drugs. Consequently, this sample may not be representative of all those who use drugs, thus affecting the generalizability of the results (Lobiondo-Wood & Singh, 2009). However, considering that many people who use drugs are 'hidden', a convenience sample was likely the most pragmatic solution to quantitative research with those who use drugs.

Additionally, the sample of nurses described by Ford et al. (2009) was predominantly comprised of acute care nurses and nurse midwives with over fifteen years of experience, while Ben Natan et al. (2009) included a sample of nurses exclusively comprised of married women in Israel. Moreover, Rassool and Oyefeso (2007) and Rassool and Rawaf (2008) utilized a sample of nurses electively attending addictions courses. As a result of the potential differences in nurses' demographics, education, pre-existing values and beliefs towards those who use substances, cultural norms related to drug use, and nursing practices, the generalizability of results to all populations of nurses providing care to those who use drugs may be affected.

Social desirability of responses was identified as another limitation of some studies. In this way, Happell and Taylor (2001) and Ford et al. (2009) conducted quantitative studies to explore nurses' negative attitudes towards those who use substances. Participants may have responded to questions in a socially desirable manner due to the sensitive nature of drug use and provision of ethical nursing care. Additionally, Fast et al. (2008) and Hilton et al. (2009) conducted qualitative studies concerning health care services for people who use drugs. They

acknowledged that research participants may have responded favourably due to concerns regarding future provision of care. This may influence the credibility of participant responses.

Another qualitative study by Gustafson et al. (2008) identified ethical concerns regarding the perceived anonymity of research participants. They acknowledge that the sensitive nature of questions regarding drug use on the mail-in questionnaire may have deterred individuals from participating in the study. However, they demonstrated ethical considerations by gaining approval from two institutional research ethics boards and carried out additional methods of data collection, such as focus groups, over a sufficient period of time to ensure detailed and thorough data collection (Streubert Speziale & Cameron, 2009).

Lastly, Hilton et al. (2009), Pauly (2008a), and Lovi and Barr (2009) discuss methods used to enhance rigour such as member checking and use of a reflexive journal. However, Fast et al. (2008), Hilton et al. (2001a), Peckover and Chidlaw (2007) and Gustafson (2008) do not devote a section to discuss methods to enhance credibility, auditability, and fittingness of the data (Streubert Speziale & Cameron, 2009).

Despite the various limitations, I determined that each of the fifteen sources contributed meaningful evidence to nursing practice and demonstrated trustworthiness and reliability to include in this integrative literature review. Each was peer-reviewed, demonstrated ethical considerations, concluded with similar findings, and achieved a mid to high quality score of at least fourteen out of a possible twenty (See Appendix D). Additionally, each quantitative article concluded with findings within the scope of the research design, while qualitative articles described phenomena in sufficient detail to achieve fittingness. That said, this integrative literature review contains a small number of articles (n=15) and does not extensively discuss the

barriers to implementing harm reduction in practice. Future research is needed to explore these barriers as well as nurses' experience of harm reduction in practice.

Discussion

In order to implement harm reduction as a guiding philosophy in nursing practice, there must be changes to every level of healthcare: intrapersonal, interpersonal, institutional, community, and public policy. At the intrapersonal level, changes to nurses' behaviour, attitudes, and skills are necessary to facilitate the implementation of harm reduction in practice.

In this way, researchers recommend the use of respectful language in practice and research towards those who use drugs and adherence to, and action on the ethical and professional standards of practice. Pauly et al. (2007) and Lightfoot et al. (2009) advise nurses to espouse harm reduction in practice as it aligns with the CNA (2008) *Code of Ethics for Registered Nurses*. Similarly, a number of literature reviews demonstrate support for harm reduction strategies as best evidence to reduce risk behaviour and promote the health and well-being of those who use illegal drugs (Hilton et al., 2001b; Ritter & Cameron, 2006).

There is support for a shift in values to espouse principles of harm reduction, acknowledgement of the social determinants of health, and a framework of non-judgemental care in practice. Pauly et al. (2009) advocate a departure from the dominant biomedical perspective towards a holistic view of patients that acknowledges the social conditions that influence health behaviours. To do this, they recommend that nurses take part in critical self-reflection and deepening political consciousness as a first step towards action on health inequities (2009).

Lastly, Villarreal and Fogg (2006) offer pragmatic harm reduction strategies for nurses caring for those who are street-involved and use drugs. They suggest that nurses provide

education on HIV prevention and risk reduction strategies as well as community resources that offer harm reduction services and other essential resources to their street-involved patients

Yet to modify individual characteristics, strategies must target broader levels of healthcare (McLeroy et al., 1988). That is to say, to improve nurses' negative attitudes and support ethical practice towards those who use drugs, action must be taken to enhance supportive working relationships, improve education, and implement policies that support harm reduction in practice. Similarly, Ford et al. (2009) explain that positive contextual factors in the workplace—such as staff cohesion and communication, a culture accepting of change, and sufficient staff and resources—are integral to sustained practice change

At the level of interpersonal and primary groups, researchers recommend that nurses modify the negative social influences that inhibit ethical nursing practice and the implementation of harm reduction in practice. To do this, research supports influencing colleagues through role modelling, education, and networking; and emphasizing a commitment to ethics in practice.

The negative judgements towards street-involved people who use drugs, criminalization of certain substances, and lack of health care policy to support harm reduction contributes to a negative ethical climate (Pauly et al., 2007). To improve the ethical climate of nursing practice, Rodney and Street (2004) advise nurses to identify themselves and others who deliver care as a moral community. By viewing themselves as moral agents, this first step allows nurses to explicate their values and utilize ethical principles to address problems. To do this, they recommend developing workplace ethics education, a nursing ethics journal club, and a nursing ethics committee (Rodney & Street, 2004)

Despite the fact that many nurses endorse and support harm reduction, there remains a lack of harm reduction policies and education at the organizational level (Pauly et al., 2007;

Pauly, 2008a). Explicit and implicit organizational values act as a barrier to the adoption of harm reduction in practice. In this way, Pauly et al. (2007) argue that a lack of organizational policies that support harm reduction inhibit nurses' ability to provide safe, competent, compassionate, and ethical care. Due to these inconsistencies, nurses may find themselves caught between evidence, ethics, and policy (CNA, 2011). There must be changes to policy and practices at the institutional level to facilitate the implementation of harm reduction as a guiding philosophy in nursing practice and promote the health of street-involved people who use drugs.

At the institutional level, researchers recommend that educational and healthcare institutions incorporate education and clinical experiences for undergraduate nursing students and continuing education in practice in order to enhance nurses' understanding and provision of ethical care to those who use drugs. There is much support for the inclusion of harm reduction and social issues affecting the health of those who use drugs throughout undergraduate nursing curricula and continuing professional education. Many recommend involvement from the community and those who use drugs to participate in undergraduate and workplace education. In this way, Pauly et al. (2009) recommend that educational institutions collaborate with community groups in order to facilitate meaningful learning experiences for nursing students.

Workplace education is recommended as a pragmatic strategy to enhance nurses' attitudes and ethical nursing practice. However, role support from management in addition to education, is necessary to support sustained practice change

In order to address the underlying conditions that contribute to health inequities, Pauly (2008a) argues that education should do more than enhance nurses' attitudes, knowledge, and skills related to substance use and harm reduction. They recommend the need for an enhanced understanding of the social issues influencing health (2008a). Similarly, some argue nurses must

have a critical understanding of policy advocacy and the effect of drug related policies and laws in order to affect change (Pauly & Goldstone, 2008; Spencely, Reutter, & Allen, 2006).

There is much support for health care institutions to modify current policies and services to incorporate a harm reduction policy in order to enhance ethical nursing practice and improve the health of those who are street-involved and use drugs, (Ball, 2007; Lightfoot et al., 2009; Pauly, 2008a; Pauly & Goldstone, 2008; Pauly et al., 2007). Similarly, many urge healthcare institutions to re-orient health services and implement structural supports grounded in best evidence and a harm reduction philosophy (Pauly et al., 2007; Wood & Stewart, 2003).

However, these changes should comprise one aspect of a comprehensive approach to address the health inequities that result from illegal drug use and homelessness. For this reason, there is much support for the integration of harm reduction in health care with action on the social determinants of health (Pauly & Goldstone, 2008; Pauly, 2008a; Pauly, 2008b).

Many recommend an increased presence in nursing leadership positions and collaboration with other healthcare providers and peers to increase access to care and ethical nursing practice. Pauly and Goldstone (2008) call for a larger nursing presence in leadership positions in policy development and practice in order to support the role of harm reduction in nursing practice. Rodney and Street (2004) recommend that health care institutions develop these accessible nursing leadership positions and provide additional resources—such as adequate staffing, regular work schedules, job security, positive interdisciplinary relationships, and educational support –in order to increase nurses' control over their work environment and prevent burnout. Some recommend that nurse leaders collaborate with other health care professionals and peer groups to increase access to comprehensive care (Limbu, 2008; Villareal & Fogg, 2006). To develop these

relationships Pauly et al. (2009) recommend that nurse leaders' role model how to effectively collaborate across sectors.

In a similar vein, many argue that nursing leadership and advocacy in provincial, national, and international professional nursing associations can play a key role in the implementation of harm reduction in policy and practice (Murphy, Canales, Norton, DeFillippis, 2005; Pauly & Goldstone, 2008). On a global scale, Pauly and Goldstone (2008) argue that the development of international organizations and conferences focused on harm reduction in nursing is integral to the development and exchange of knowledge among nurses working in harm reduction internationally.

Murphy et al. (2005) state the need for political and national nursing organizations to take a political stand for ethical, cost-effective, and less racially biased policies on drug use. Others urge nursing associations to endorse harm reduction and develop a national position for nursing practice (CNA, 2011). The CNA recommends that provincial nursing organizations develop position statements regarding harm reduction and apply and interpret existing nursing policy—such as the CNA code of ethics and professional standards of practice—with recommendations for providing care to those who use drugs (2011). It is important to recognize some of the actions and advocacy recently carried out by numerous nursing organizations. The CNA (2011) commissioned a discussion paper on harm reduction; the British Columbia Nurses' Union and CNA acted as interveners in support of Insite, the supervised injection site, in the recent Supreme Court of Canada case; lastly, the Saskatchewan Registered Nurses' Association (2010) developed a position statement endorsing harm reduction in practice.

To promote the health of those who are street-involved and use drugs, researchers recommended actions targeted at the community of nurses and those who use drugs. First of all,

many identify nursing research as a means to support harm reduction in practice, involve the community, and contribute to evidence based practice. Some argue the need for nurses to conduct research that highlights the social consequences of current drug policy as well as the social, economic, and political conditions that influence drug use and the health of those who use drugs (Pauly & Goldstone, 2008; Pauly et al., 2009).

Secondly, many argue that advocacy in practice can raise awareness of the influence of broader social conditions, policy, and social structures that influence health and substance use. Spencely et al. (2006) discuss the importance of nursing advocacy at the policy level in order to influence change. Specifically nurses, as the largest group of healthcare professionals, are urged to advocate for health policy change that addresses the social determinants of health (Pauly et al., 2009; Spencely et al., 2006). To do this, they recommend a collaborative approach to policy advocacy that includes nurse researchers, educators, and practitioners (2006). Pauly et al. (2009) suggest that nurses join together to discuss their concerns and take action by recording their observations using incident reports. They propose that this process could highlight the influence of social conditions on health and prompt institutions to take action (2009). Lastly, Spencely et al. (2006) recommend nurses increase their engagement with professional nursing organizations and utilize the opportunities provided for policy change.

Many recommend collaboration with peers in policy and programme development to increase access to health care and strengthen the community's access to political and power structures (McLeroy et al., 1988; Pauly et al., 2009). Pauly (2008b) identifies the need for nurses to engage, actively collaborate with, and involve those who use drugs in the development of policy and programmes in order to achieve systemic change. Pauly et al. (2009) argue that participation of communities affected by health inequities, such as those who use drugs, is

essential to the policy process. Similarly, Walisser and Belle-Isle (2010) recommend peer involvement in health care service design and delivery to improve responsiveness to clients' needs, expand the reach of services, increase trust, and empower clients through role modelling.

At the level of public policy, action must be taken on the development and analysis of policy and law at the local, provincial, and national level to effect change (McLeroy et al., 1988). Some challenge prohibitionist drug policies that criminalize and further marginalize those who use drugs as well as social policies that exacerbate harm. In this way, there is discussion regarding the limitations of prohibitionist drug policy and call attention to the resulting negative impacts on public health (Murphy et al., 2005; Pauly, 2008b; Pauly et al., 2007; Wood & Stewart, 2003). Accordingly, some call for the reform of prohibitionist drug policies that contribute to further discrimination and marginalization of those who use drugs and result in negative consequences for the health of these individuals and the population (Murphy et al., 2005; Pauly et al., 2007; Wood & Stewart, 2003). However, Pauly et al. (2007) argue that drug policy reform must be "part of a broader agenda to enhance social justice that seeks to take action on the underlying conditions that produce poor health such as homelessness, violence, poverty and racism" (p. 22).

Accordingly, Ball (2007) recommends supportive policies that facilitate access to healthcare rather than laws that preclude access to services through criminalization and marginalization of those who use drugs. Beirness et al. (2008) call for policy makers to adopt a comprehensive approach to deal with illegal drug use and implement laws that are based on current evidence. The CNA (2011) explains that there is much support for a public health approach to drug policy that includes harm reduction interventions. Lastly, some public health

stakeholders across the globe have advocated for the regulation all currently illegal drugs (CNA, 2011; Pauly et al., 2007).

While drug policy reform and harm reduction interventions are an important aspect of lessening the harms associated with drug use, they do not address the underlying social issues (Pauly, 2008a). For this reason, much literature highlights the need for public policy to take action on the social determinants of health (Pauly, 2008b; Pauly et al., 2007; Pauly et al., 2009). Additionally, Pauly (2008b) advocates systemic change by analyzing the ways in which public policy leads to poor health outcomes for those who are street-involved and use drugs. Specifically, neo-liberal values that underpin policy as well as policies governing housing, policing, social assistance, income, and employment that exacerbate harm among street-involved people who use drugs must be challenged (Pauly, 2008b). Lastly, Pauly (2008b) argues that reframing policies in a social justice framework has the potential to highlight the values underlying current policy and call attention to the harms created by social conditions.

Conclusion

People who are street-involved and use drugs suffer from a myriad of social, mental, physical, and social harms related to the consequences of homelessness and illegal drug use. These serious health inequities are exacerbated by a lack of access to care that result from financial, geographic, social, political, and relational barriers. Of significant ethical concern is the relational barrier posed by prevailing stigmatizing attitudes and discriminatory behaviour of nurses as it violates professional and ethical standards of practice and is rooted in a negative ethical climate. To address these health inequities, increase access to health care, and improve the ethical climate of nursing practice, harm reduction is identified as a philosophy to guide nursing practice.

Yet, despite the well-established evidence base to support harm reduction, its implementation in practice has been met with resistance. To address these barriers, this integrative literature review concluded with actions at the intrapersonal, interpersonal, institutional, community, and public policy levels necessary to implement harm reduction in nursing practice. Recommendations for action highlight the importance of action at all levels of healthcare, from personal practice to health policy.

Key recommendations demonstrate the need for a shift to respectful language in practice and research, adherence to the ethical and professional standards of nursing practice, acknowledgement of the social determinants of health on individual behaviour, and a framework of non-judgemental care. Nurses are called upon to influence colleagues by expressing a commitment to ethics in practice, role modelling, educating peers, and networking. At a broader level, educational and healthcare institutions are encouraged to incorporate harm reduction and social issues in undergraduate nursing curricula and continuing professional education. Furthermore, health care institutions are encouraged to modify existing policies and incorporate structural supports that facilitate the implementation of harm reduction in practice. Nursing organizations are encouraged to advocate for harm reduction in practice, while nurse researchers are called upon to develop the knowledge base of harm reduction in nursing practice. Lastly, action on policies at the local, provincial, and national levels should be amended to facilitate access to health care and take action on the social determinants of health.

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Appendix A

Problem Formulation: Definitions

Variable of Interest	Conceptual Definition	Operational Definition
Harm reduction	"policies, programmes and practices that aim to primarily reduce the adverse health, social and economic consequence of the use of legal and illegal psychoactive substances without necessarily reducing drug consumption" (International Harm Reduction Association, 2010)	-Includes 'harm minimization' -Programmes, policies, and practices related to illegal drug use. -Wide ranging philosophy of harm reduction. -Does not include alcohol; drink driving, use of seatbelts, safer sex etc. -Focus on nursing practice.
Ethical nursing practice	-Canadian Nurses' Association Code of Ethics for Registered Nurses (2008): 1) Providing safe, compassionate, competent and ethical care Nurses provide safe, compassionate, competent and ethical care. 2) Promoting health and well-being Nurses work with people to enable them to attain their highest possible level of health and well-being. 3) Promoting and respecting informed decision-making Nurses recognize, respect and promote a person's right to be informed and make decisions. 4) Preserving dignity Nurses recognize and respect the intrinsic worth of each person. 5) Maintaining privacy and confidentiality Nurses recognize the importance of privacy and confidentiality and safeguard personal, family and community information obtained in the context of a professional relationship. 6) Promoting justice Nurses uphold principles of justice by safeguarding human	-Adheres to CNA's professional ethical standards of nursing practice. -Facilitates access to health care by providing equitable quality of care.

	rights, equity and fairness and by promoting the public good. 7) Being accountable Nurses are accountable for their actions and answerable for their practice. -Focus on equitable access to health care by providing equitable quality of care -Equitable access: provision of health services in a way that provides an equal opportunity for all citizens to achieve maximum health (Health Canada, 2001) -Decrease health inequities: differences in health status or in the distribution of health determinants between different population groups/social groups (WHO, 2011).	
Street-involved people who use drugs	-Street-involved: a continuum of circumstances, including absolute homelessness, precarious housing, use of services for people who are street-involved, spending a large amount of time on the street, and participating in street lifestyle activities such as prostitution and drug trafficking (Pauly, 2005; Worthington & MacLaurin, 2009). -Drugs: wide range of substances (legal/illegal, inject/smoke/oral). -Does not include alcohol.	-Homeless/precariously housed/use services for street-involved people/spend majority of time on the street/absolute homelessness. -Usually low socioeconomic status/poverty -Use substances (illicit and licit drugs/all routes: inject, smoke, oral) -Includes both men and women (not a specific focus on youth) -With/without mental health issues

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Appendix B

Data Evaluation Tool: Qualitative Research

Aspect of the Report	Criteria	Score	Notes
Title and abstract	Was the title a good one, suggesting the key phenomenon and the group or community under study? Does the abstract clearly and concisely summarize the main features of the report?	/1	
Introduction			
Statement of the problem	Is the problem stated unambiguously, and is it easy to identify? Does the problem statement build a cogent and persuasive argument for the new study? Does the problem have significance in nursing? Is there a good match between the research problem, on the one hand, and the paradigm, traditions, and methods on the other?	/1	
Research questions	Are research questions explicitly stated? If not, is their absence justified? Are the questions consistent with the study's philosophical basis, underlying tradition, conceptual framework, or ideological orientation?	/1	
Literature review	Does the report adequately summarize the existing body of knowledge related to the problem or phenomenon of interest? Does the literature review provide a solid basis for the new study?	/1	
Conceptual underpinnings	Are key concepts defined conceptually? Is the philosophical basis, underlying tradition, conceptual framework, or ideological orientation made explicit, and is it appropriate for the problem?	/1	
Method			
Protection of participants' rights	Were appropriate procedures used to safeguard the rights of study participants? Was the study subject to external review? Was the study designed to minimize risks and maximize benefits to participants?	/1	
Research design and tradition	Is the identified research tradition, if any, congruent with the methods used to collect and analyze data? Was an adequate amount of time spent in the field or with study participants? Did the design unfold in the field, giving researchers opportunities to capitalize on	/1	

	early understandings? Was there evidence of reflexivity in the design? Were there an adequate number of contacts with study participants?		
Sample and setting	Was the group or population of interest adequately described? Were the setting and sample described in enough detail? Was the approach used to gain access to the site or to recruit participants appropriate? Was the best possible method of sampling used to enhance information richness and address the needs of the study? Was the sample size adequate? Was saturation achieved?	/1	
Data collection	Were the methods of gathering data appropriate? Were the data gathered through two or more methods to achieve triangulation? Did the researcher ask the right questions or make the right observations, and were they recorded in an appropriate fashion? Was a sufficient amount of data collected? Were the data of sufficient depth and richness?	/1	
Procedures	Were data collection and recording procedures appropriate and adequately described? Were data collected in a manner that minimized bias or behavioural distortions? Were the staff who collected the data properly trained?	/1	
Enhancement of rigour	Were methods used to enhance the trustworthiness of the data and analysis, and was the description of those methods adequate? Were the methods used to enhance credibility appropriate and sufficient? Did the researcher document research procedures and decision processes sufficiently, so that findings are auditable and confirmable?	/1	
Results			
Data analysis	Were the data management (eg, coding) and data analysis methods sufficiently described? Was the data analysis strategy compatible with the research tradition and with the nature and type of data gathered? Did the analysis yield an appropriate “product” (eg, theory, taxonomy, thematic pattern)? Did the analytic procedure suggest the possibility of biases?	/1	
Findings	Were the findings effectively summarized, with good use of excerpts and supporting	/1	

	arguments? Do the themes capture the meaning of the data? Does it appear that the researcher conceptualized the themes or patterns in the data? Did the analysis yield an insightful, provocative, and meaningful picture of the phenomenon under investigation?		
Discussion			
Interpretation of findings	Are the findings interpreted within an appropriate frame of reference? Are major findings interpreted and discussed within the context of previous studies? Are the interpretations consistent with the study's limitations? Does the report address the issue of transferability of the findings?	/1	
Implications/recommendations	Do the researchers discuss implications of the study for clinical practice or further inquiry, and are those implications reasonable and complete?	/1	
Global Issues			
Presentation	Was the report well-written, well-organized, and sufficiently detailed for critical analysis? Was the description of the methods, findings, and interpretations sufficiently rich and vivid?	/1	
Researcher credibility	Do the researchers' clinical, substantive, or methodologic qualifications and experience enhance confidence in the findings and their interpretation?	/1	
Summary assessment	Do the study findings appear to be trustworthy? Do you have confidence in the truth value of the results? Does the study contribute any meaningful evidence that can be used in nursing practice or that is useful to the nursing discipline?	/1	
Data relevance		/2	
Total Score		/20	

Adapted from:

Beck, C.T. (2009a). Critiquing Qualitative Research. *Association of Perioperative Registered Nurses Journal, 90*(4), 543-554.

Whittemore, R., & Knafl, K. (2005). The integrative review: Updated methodology. *Journal of Advanced Nursing, 52*(5), 546-553.

Appendix C

Data Evaluation Tool: Quantitative Research

Section	Notes	Score
Problem statement and purpose	-What is the problem or purpose of the research study? -Does the problem or purpose statement express a relationship between two or more variables? If so, is the relationship testable? -Does the problem statement or purpose specify the nature of the population being studied? -What significance of the problem, if any, has the investigator identified?	/1
Review of the literature and theoretical framework	-What concepts are included in the review? -Does the literature review make the relationships among the variables explicit or place the variables within a theoretical or conceptual framework? -What gaps or conflicts in knowledge of the problem are identified? -Are the references cited by the author mostly primary or secondary sources? -What are the operational definitions of the independent and dependent variables? Do they reflect the conceptual definitions?	/1
Hypotheses or research questions	-What hypotheses or research questions are stated in the study? -If research questions are stated, are they used in addition to hypotheses or to guide an exploratory study? -What are the independent and dependent variables in the statement of each hypothesis or research question? -If hypotheses are stated, is the form of the statement statistical or research? -What is the direction of the relationship in each hypothesis? -Are the hypotheses testable?	/1
Sample	-What type of sampling method is used? Is it appropriate? -Does the sample reflect the population as identified in the problem or purpose statement? -Is the sample size appropriate? -To what population may the findings be generalized? What are the limits to generalizability?	/1

Research design	-What type of design is used? -What is the rationale for the design classification? -Does the design seem to flow from the proposed research problem, theoretical framework, literature review, and hypothesis?	/1
Internal validity	-Discuss each threat to internal validity of the study. -Does the design have controls at an acceptable level for threats to internal validity?	/1
External validity	-What are the limits to generalizability in terms of external validity?	/1
Research approach	-Does the research approach fit with the purpose of the study?	/1
Methods	-What data collection methods are used in the study? -Are the data collection procedures similar for all subjects?	/1
Legal-ethical issues	-Have the rights of subjects been protected? How? -What indications are given that informed consent of the subjects was ensured?	/1

Instruments	• Physiological measurement:
	  ○ Rationale given why instrument/method was selected?
	  ○ What provision is made for maintaining the accuracy of the instrument and its use?
	• Observational methods:
	  ○ Who did the observing?
	  ○ How were the observers trained to minimize bias?
	  ○ Did the observers have an observational guide?
	  ○ Were the observers required to make inferences about what they saw?
	  ○ Is there any reason to believe that the presence of the observers affected the behaviour of the subjects?
	• Interviews:
	  ○ Who were the interviewers? How were they trained to minimize bias?
	  ○ Is there evidence of interviewer bias?
	• Questionnaires:
	  ○ What is the type/format of the questionnaires?
	  ○ Are they consistent with the conceptual definitions?
	• Available data and records:
	  ○ Are the records that were used appropriate to the problem studied?
	  ○ Were the data used to describe the sample or for hypothesis testing?
		/1

Reliability and validity	-What type of reliability is reported for each instrument? -What level of reliability is reported? Is it acceptable? -What type of validity is reported for each instrument? -Does the validity of each instrument seem adequate?	/1
Analysis of data	-What level of measurement is used to measure each of the major variables? -What descriptive or inferential statistics are reported? -Were there descriptive or inferential statistics appropriate to the level of measurement for each variable? -Are the inferential statistics used appropriate to the intent of the hypothesis? -Does the author report the level of significance set for the study? -If tables/figures are used do they: supplement and economize the text, have precise titles and headings?	/2
Conclusions, implications, and recommendations	-If hypothesis testing was done, were the hypotheses supported or not? -Are the results interpreted in the context of the problem or purpose, hypothesis, and theoretical framework? -What does the investigator identify as limitations or problems in the study related to the design, methods, and sample? -What relevance for nursing practice does the investigator identify? -What generalizations are made? -Are the generalizations within the scope of the findings? -What recommendations for future research are stated?	/2
Application and utilization for nursing practice	-Does the study appear to be valid? -Do other studies have similar findings? -What risks or benefits are involved for clients if the research findings are used in practice? -Is direct application of the research findings feasible in terms or time, effort, money, and legal-ethical risks? -How are the findings applicable to nursing practice? -Should these results be applied to nursing practice? -Would it be possible to replicate this study in another clinical practice setting?	/2
Data Relevance		/2
Total Score		/20

Adapted from:

Heerman, J.A., Craft, B.J., & Singh, M.D. (2009). Critiquing quantitative research. In LoBiondo- Wood, G., & Haber, J. (2009). *Nursing research in Canada: Methods and critical appraisal for evidence-based practice* (2nd Ed.). Toronto, ON: Elsevier Canada.
Whittemore, R., & Knafl, K. (2005). The integrative review: Updated methodology. Journal of Advanced Nursing, 52(5), 546-553.

Appendix D

Data Evaluation Scores

Article	Qualitative Score /20	Quantitative Score /20
Fast, D., Small, W., Wood, E., Kerr, T. (2008). The perspective of injection drug users regarding safer injecting education delivered through a supervised injecting facility. *Harm Reduction Journal, 5*(32).	16.25	
Wood, E., Tyndall, M.W., Stoltz, J., Small, W., Zhang, R., O'Connell, J., Montaner, J.G., & Kerr, T. (2005). Safer injecting education for HIV prevention within a medical supervised safer injecting facility. *International Journal of Drug Policy, 16,* 281-284.		16
Wood, R.A., Wood, E., Lai, C., Tyndall, M.W., Montaner, J.G., & Kerr, T. (2008). Nurse-delivered safer injection education among a cohort of injection drug users: Evidence from the evaluation of Vancouver's supervised injection facility. *International Journal of Drug Policy, 19,* 183-188.		17
Limbu, B. (2008). The role of community-based nurses in harm reduction for HIV prevention: A South East and South Asia case study. *International Journal of Drug Policy, 19,* 211-213.	14.25	
Gustafson, D.L., Goodyear, L., & Keough, F. (2008). When the dragon's awake: A needs assessment of people injecting drugs in a small urban centre. *International Journal of Drug Policy, 19*, 189-194.	17	
Hilton, B.A., Thompson, R., & Moore-Dempsey, L. (2009). Evaluation of the AIDS prevention street nurse program: One step at a time. *Canadian Journal of Nursing Research, 41*(1), 238-258.	17.5	
Ford, R., Bammer, G., & Becker, N. (2009). Improving nurses' therapeutic attitude to patients who use illicit drugs: Workplace drug and alcohol education is not enough. *International Journal of Nursing Practice, 15*(2), 112-118.		15.75
Lovi, R., & Barr, J. (2009). Stigma reported by nurses related to those experiencing drug and alcohol dependency: A phenomenological Giorgi study. *Contemporary Nurse, 33*(2), 166-178.	19	
Hilton, B.A., Thompson, R., Moore-Dempsey, L., & Hutchinson, K. (2001a). Urban outpost nursing: The nature of the nurses' work in the AIDS prevention street nurse program. *Public Health Nursing, 18*(4), 273-280.	16.5	
Ben Natan, M.B., Beyil, V., & Neta, O. (2009). Nurses' perception of the quality of care they provide to hospitalized drug addicts: Testing the Theory of Reasoned Action. *International Journal of Nursing Practice, 15,* 566-573.		14
Pauly, B. (2008a). Shifting moral values to enhance access to health care: Harm reduction as a context for ethical nursing practice. *International Journal of Drug Policy, 19, 195-204.*	18.5	

Peckover, S., & Chidlaw, R.G. (2007). Too frightened to care? Accounts by district nurses working with clients who misuse substances. *Health and Social Care in the Community, 15*(3), 238-245.	16	
Rassool, G.H., & Oyefeso, A. (2007). Predictors of course satisfaction and perceived course impact of addiction nurses undertaking a postgraduate diploma in addictive behavior. *Nurse Education Today, 27*(3), 256 -265.		15.75
Rassool, G.H., & Rawaf, S. (2008). Predictors of educational outcomes of undergraduate nursing students in alcohol and drug education. *Nurse Education Today, 28*(6), 691 -701		16.75
Happell, B., & Taylor, C. (2001). Negative attitudes towards clients with drug and alcohol related problems: Finding the elusive solution. *Australian and New Zealand Journal of Mental Health Nursing, 10,* 87-88.		15.5

Appendix E

Data Evaluation

Fast, D., Small, W., Wood, E., Kerr, T. (2008). The perspective of injection drug users regarding safer injecting education delivered through a supervised injecting facility. *Harm Reduction Journal, 5(32).*

Aspect of the Report	**Criteria**	**Score**	**Notes**
Title and abstract	Was the title a good one, suggesting the key phenomenon and the group or community under study? Does the abstract clearly and concisely summarize the main features of the report?	1/1	-Clear title and succinct abstract.
Introduction			
Statement of the problem	Is the problem stated unambiguously, and is it easy to identify? Does the problem statement build a cogent and persuasive argument for the new study? Does the problem have significance in nursing? Is there a good match between the research problem, on the one hand, and the paradigm, traditions, and methods on the other?	1/1	-Problem stated and gap in research identified. -Problem statement persuasive and significant to nursing practice. -Aims to find perspective/experience of population, thus research methodology is appropriate.
Research questions	Are research questions explicitly stated? If not, is their absence justified? Are the questions consistent with the study's philosophical basis, underlying tradition, conceptual framework, or ideological orientation?	1/1	-Research question broad, but appropriate as research aims to explore wide range of experiences. -Consistent with qualitative research paradigm.
Literature review	Does the report adequately summarize	1/1	-Brief literature review containing current primary

	the existing body of knowledge related to the problem or phenomenon of interest? Does the literature review provide a solid basis for the new study?		sources. -Summarizes existing knowledge and identifies gap in research.
Conceptual underpinnings	Are key concepts defined conceptually? Is the philosophical basis, underlying tradition, conceptual framework, or ideological orientation made explicit, and is it appropriate for the problem?	0/1	-No theoretical framework identified. -May have been useful to include theory of change in order to provide context.
Method			
Protection of participants' rights	Were appropriate procedures used to safeguard the rights of study participants? Was the study subject to external review? Was the study designed to minimize risks and maximize benefits to participants?	1/1	-Informed consent gained from each participant. -Ethical approval gained from each institution. -Honorarium provided.
Research design and tradition	Is the identified research tradition, if any, congruent with the methods used to collect and analyze data? Was an adequate amount of time spent in the field or with study participants? Did the design unfold in the field, giving researchers opportunities to capitalize on early understandings? Was there evidence of reflexivity in the design? Were there an adequate number of contacts with study participants?	.5/1	-Phenomenology; data collected using in-depth interviews. No mention of questions- open/closed ended. -Interviews conducted over a period of 4 months. -No mention of validating findings with participants. -No mention of reaching data saturation or multiple interviews.

Sample and setting	Was the group or population of interest adequately described? Were the setting and sample described in enough detail? Was the approach used to gain access to the site or to recruit participants appropriate? Was the best possible method of sampling used to enhance information richness and address the needs of the study? Was the sample size adequate? Was saturation achieved?	.5/1	-Population, setting, and sample adequately described. -Approach to recruit participants appropriate; part of a larger study representative of population. -Sampling may not have reached hidden population, perspectives of nurses delivering education not represented, and possibility of social desirability in responses; acknowledged in discussion. -Sample size adequate; 50. -Data indicated much overlap.
Data collection	Were the methods of gathering data appropriate? Were the data gathered through two or more methods to achieve triangulation? Did the researcher ask the right questions or make the right observations, and were they recorded in an appropriate fashion? Was a sufficient amount of data collected? Were the data of sufficient depth and richness?	.5/1	-Data collection methods appropriate. -Single method; no triangulation. -Small number of similarly trained interviewers using a standardized topic guide. -Lengthy interviews; 30-60 minutes. -Data collection indicated overlap.
Procedures	Were data collection and recording procedures appropriate and adequately described? Were data collected in a manner that minimized bias or behavioural distortions? Were the staff who collected the data	.5/1	-Recording procedures adequately described and appropriate. -No mention of recording interviewer observations. -Mention of similar training among interviewers.

	properly trained?		
Enhancement of rigour	Were methods used to enhance the trustworthiness of the data and analysis, and was the description of those methods adequate? Were the methods used to enhance credibility appropriate and sufficient? Did the researcher document research procedures and decision processes sufficiently, so that findings are auditable and confirmable?	.5/1	-No section on enhancement of rigour. -No mention of validating findings with participants. -Included a large section of direct quotations from participants.
Results			
Data analysis	Were the data management (eg, coding) and data analysis methods sufficiently described? Was the data analysis strategy compatible with the research tradition and with the nature and type of data gathered? Did the analysis yield an appropriate "product" (eg, theory, taxonomy, thematic pattern)? Did the analytic procedure suggest the possibility of biases?	.75/1	-Thorough description of data analysis in the report. -Data analysis consistent with phenomenology. -Data analysis yielded appropriate product; themes from the interviews. -Possibility of bias due to no mention of validating findings or discussion between interviewers.
Findings	Were the findings effectively summarized, with good use of excerpts and supporting arguments? Do the themes capture the meaning of the data? Does it appear that the researcher conceptualized the themes or patterns in the data? Did the analysis yield an insightful,	1/1	-Findings were effectively summarized in themes. -Themes reflect data and yield a meaningful picture of the perspective of injection drug users.

	provocative, and meaningful picture of the phenomenon under investigation?		
Discussion			
Interpretation of findings	Are the findings interpreted within an appropriate frame of reference? Are major findings interpreted and discussed within the context of previous studies? Are the interpretations consistent with the study's limitations? Does the report address the issue of transferability of the findings?	1/1	-Findings discussed with reference to academic literature. -Findings discussed with reference to theoretical framework; including importance of contextual factors and behavioural change. -Discussion of limitations of findings and limits of transferability.
Implications/recommendations	Do the researchers discuss implications of the study for clinical practice or further inquiry, and are those implications reasonable and complete?	1/1	-Discuss implications of findings and identify areas for further research.
Global Issues			
Presentation	Was the report well-written, well-organized, and sufficiently detailed for critical analysis? Was the description of the methods, findings, and interpretations sufficiently rich and vivid?	1/1	-Well written and organized. -Description rich.
Researcher credibility	Do the researchers' clinical, substantive, or methodologic qualifications and experience enhance confidence in the findings and their interpretation?	1/1	-Researchers'' experience and credentials demonstrate competence and enhance confidence.
Summary assessment	Do the study findings appear to be trustworthy? Do you have confidence in the truth value of the results?	1/1	-Findings appear trustworthy and contributes meaningful evidence.

	Does the study contribute any meaningful evidence that can be used in nursing practice or that is useful to the nursing discipline?		
Data relevance		2/2	
Total Score		16.25/20	

Data Evaluation: Quantitative Research

Wood, E., Tyndall, M.W., Stoltz, J., Small, W., Zhang, R., O'Connell, J., Montaner, J.G., & Kerr, T. (2005). Safer injecting education for HIV prevention within a medical supervised safer injecting facility. *International Journal of Drug Policy, 16,* 281-284.

Section	**Notes**	**Score**
Problem statement and purpose	-Problem clearly stated and situated within current research. -Gap in research identified. -Purpose explicated.	1/1
Review of the literature and theoretical framework	-Comprehensive literature review with a large number of up to date primary sources. -No mention of theoretical framework.	1/1
Hypotheses or research questions	-Mention of research question; the prevalence and correlates of receiving safer injecting education. -Definitions would have made research question clearer.	.5/1
Sample	-Comprised of participants in larger SEOSI cohort study. -Large sample size (874 participants). -Sample selected using random sampling method; appropriate to the design. -Sample representative of people who use the SIF.	1/1
Research design	-Quasi-experimental correlational study appropriate to research question and what is currently known.	1/1
Internal validity	-Instrumentation: no discussion of questionnaire used to gather data. -Selection bias: sample may not represent all individuals who inject drugs as this population is often hidden.	.5/1
External validity	-Selection effects: may not be generalizable to other populations of injection drug users. -Measurement effects: questionnaire may not measure what it is meant to. No mention of tool validity or reliability.	.5/1

	-Reactive effects: responses may be influenced by social desirability.	
Research approach	-Quasi-experimental correlational study appropriate to research question and data collection methods.	1/1
Methods	-Interviewer-administered questionnaire given to participants; same for all participants. -No mention of similar training for interviewers.	1/1
Legal-ethical issues	-Informed consent gained from participants. -Ethical approval gained from each institution.	1/1
Instruments	-No description of interviewers, credentials or training.	.5/1
Reliability and validity	-No mention of instrument validity or reliability. -However, description of factors frequently associated with requiring help injecting backed up by academic research.	.5/1
Analysis of data	-Data analysed using univariate and logistic regression analyses. -Findings reported using various inferential statistics. (P-value, confidence interval) -Table used to enhance findings.	2/2
Conclusions, implications, and recommendations	-Findings explained in context of research question and literature review. -Generalizations within the scope of the research design; no attempt to explain causation. -No mention of limitations. -Recommendations made for future research.	1.5/2
Application and utilization for nursing practice	-Study appears to be valid and trustworthy. -No section for application to nursing practice, however, there is evidence to guide nursing practice.	1.5/2
Data Relevance		1.5/2
Total Score		16/20

Wood, R.A., Wood, E., Lai, C., Tyndall, M.W., Montaner, J.G., & Kerr, T. (2008). Nurse-delivered safer injection education among a cohort of injection drug users: Evidence from the evaluation of Vancouver's supervised injection facility. *International Journal of Drug Policy*, *19*, 183-188.

Section	**Notes**	**Score**
Problem statement and	-Problem and purpose clearly stated.	1/1

purpose		
Review of the literature and theoretical framework	-Comprehensive literature review consisting of a large number of primary studies. -Identifies research to date and gaps in research. -No mention of theoretical framework.	1/1
Hypotheses or research questions	-Research questions stated. -No hypotheses mentioned.	1/1
Sample	-Random sampling from SEOSI cohort study. -Sampling methods explained in detail. -Sufficient sample size (1087). -Sample representative of SIF participants.	1/1
Research design	-Quasi-experimental prospective design appropriate to research question and knowledge to date. -3 interviewer-administered questionnaires.	1/1
Internal validity	-History: another variable could have been responsible for the change in injecting behaviours other than safer injection education. -Instrumentation: no measures of validity or reliability provided for the questionnaire used to gather data. -Selection bias: sample may not represent all individuals who inject drugs as this population is often hidden. -Mortality: no mention of lost participants. -Maturation: changes in behaviour may be related to other factors such as development. -Testing: questionnaire given 3 times. Social desirability may also be a factor.	.5/1
External validity	-Selection effects: sample may not be generalizable to other populations. -Measurement effects: no mention of reliability or validity of tool. -Reactive effects: social desirability.	.5/1
Research approach	-Quasi-experimental prospective design appropriate for research question and literature review. -Mixed method approach including perspectives of participants could have been useful to validate findings.	.5/1
Methods	-3 interviewer-administered questionnaires same for all participants. -Methods appropriate to design.	1/1
Legal-ethical issues	-Informed consent gained from all participants. -Ethical approval gained from institutions.	1/1

	-Honorarium provided. -No mention of measures to ensure confidentiality.	
Instruments	-Interviewer-administered questionnaire. -No mention of training methods or credentials of interviewers. -Interview questions grounded in research and what is known about topic to date.	.5/1
Reliability and validity	-No mention of instrument validity or reliability. -Questions based on current research.	.5/1
Analysis of data	- Data analysed using bivariate and multivariate GEE analyses. -Findings reported using various inferential statistics. (P-value of <.05, confidence interval) -Tables used to enhance findings.	2/2
Conclusions, implications, and recommendations	-Results interpreted in context of the problem and current research. -Generalizations within the scope of the research design; no attempt to explain causation. -Acknowledges limitations regarding generalizability and possible social desirability of responses. -Recommendations made for future research.	1.5/2
Application and utilization for nursing practice	-Identifies areas for future research and applicability to nursing practice. -Recommendations for practice are feasible.	2/2
Data Relevance		2/2
Total Score		17/20

Limbu, B. (2008). The role of community-based nurses in harm reduction for HIV prevention: A South East and South Asia case study. *International Journal of Drug Policy, 19,* 211-213.

Aspect of the Report	**Criteria**	**Score**	**Notes**
Title and abstract	Was the title a good one, suggesting the key phenomenon and the group or community under study? Does the abstract clearly and concisely summarize the main features of the report?	1/1	-Clear and detailed title and abstract.
Introduction			
Statement of the problem	Is the problem stated unambiguously, and is it easy to identify? Does the problem statement build a	1/1	-Problem stated clearly; lack of research on harm reduction in specific countries in Asia. -Problem statement clearly identifies need for research

	cogent and persuasive argument for the new study? Does the problem have significance in nursing? Is there a good match between the research problem, on the one hand, and the paradigm, traditions, and methods on the other?		and builds a persuasive argument.
Research questions	Are research questions explicitly stated? If not, is their absence justified? Are the questions consistent with the study's philosophical basis, underlying tradition, conceptual framework, or ideological orientation?	1/1	-Research question clearly stated. -Questions consistent with the beliefs underlying case study approach.
Literature review	Does the report adequately summarize the existing body of knowledge related to the problem or phenomenon of interest? Does the literature review provide a solid basis for the new study?	1/1	-Context is explained in detail with support from literature. -Lit review provides a solid basis and context for case study.
Conceptual underpinnings	Are key concepts defined conceptually? Is the philosophical basis, underlying tradition, conceptual framework, or ideological orientation made explicit, and is it appropriate for the problem?	.5/1	-Article assumes knowledge of injection drug use. -Case study appropriate for the problem.
Method			
Protection of participants' rights	Were appropriate procedures used to safeguard the rights of study participants? Was the study subject to external	1/1	-No specific people identified. No names given.

	review? Was the study designed to minimize risks and maximize benefits to participants?		
Research design and tradition	Is the identified research tradition, if any, congruent with the methods used to collect and analyze data? Was an adequate amount of time spent in the field or with study participants? Did the design unfold in the field, giving researchers opportunities to capitalize on early understandings? Was there evidence of reflexivity in the design? Were there an adequate number of contacts with study participants?	1/1	-Case study method congruent with rich description of the phenomena.
Sample and setting	Was the group or population of interest adequately described? Were the setting and sample described in enough detail? Was the approach used to gain access to the site or to recruit participants appropriate? Was the best possible method of sampling used to enhance information richness and address the needs of the study? Was the sample size adequate? Was saturation achieved?	.5/1	-Population of interest broadly described. -More information on demographics would have been helpful in determining fittingness. -Setting described in rich detail with support from literature.
Data collection	Were the methods of gathering data appropriate?	.5/1	-Data collection involved thick description. -No perspectives of people who use drugs included.

	Were the data gathered through two or more methods to achieve triangulation? Did the researcher ask the right questions or make the right observations, and were they recorded in an appropriate fashion? Was a sufficient amount of data collected? Were the data of sufficient depth and richness?		
Procedures	Were data collection and recording procedures appropriate and adequately described? Were data collected in a manner that minimized bias or behavioural distortions? Were the staff who collected the data properly trained?	1/1	-Data collected from a variety of sources including socio-political factors, nursing practices, and services. -Comprehensive picture.
Enhancement of rigour	Were methods used to enhance the trustworthiness of the data and analysis, and was the description of those methods adequate? Were the methods used to enhance credibility appropriate and sufficient? Did the researcher document research procedures and decision processes sufficiently, so that findings are auditable and confirmable?	.5/1	-No section on enhancement of rigour. -Published in peer reviewed journal. -Author credentials not given. -No evidence of validating findings with population.
Results			
Data analysis	Were the data management (eg, coding) and data analysis methods sufficiently described?	0/1	-No mention of how data was analysed. -No auditable data trail. -From author's perspective, no evidence of collaboration

	Was the data analysis strategy compatible with the research tradition and with the nature and type of data gathered? Did the analysis yield an appropriate "product" (eg, theory, taxonomy, thematic pattern)? Did the analytic procedure suggest the possibility of biases?		with others.
Findings	Were the findings effectively summarized, with good use of excerpts and supporting arguments? Do the themes capture the meaning of the data? Does it appear that the researcher conceptualized the themes or patterns in the data? Did the analysis yield an insightful, provocative, and meaningful picture of the phenomenon under investigation?	1/1	-Findings effectively summarized and problem areas identified.
Discussion			
Interpretation of findings	Are the findings interpreted within an appropriate frame of reference? Are major findings interpreted and discussed within the context of previous studies? Are the interpretations consistent with the study's limitations? Does the report address the issue of transferability of the findings?	.75/1	-Findings interpreted within the context of the case study. -Recommendations within the scope of the research method. -No mention of limitations.
Implications/recommendations	Do the researchers discuss implications of the study for clinical	.5/1	-Problems clearly identified. -No clear statement of gaps in research.

	practice or further inquiry, and are those implications reasonable and complete?		-Recommendations feasible for nursing practice.
Global Issues			
Presentation	Was the report well-written, well-organized, and sufficiently detailed for critical analysis? Was the description of the methods, findings, and interpretations sufficiently rich and vivid?	1/1	-Well written and well organized report. -Description rich and vivid.
Researcher credibility	Do the researchers' clinical, substantive, or methodologic qualifications and experience enhance confidence in the findings and their interpretation?	0/1	-No mention of credentials or experience.
Summary assessment	Do the study findings appear to be trustworthy? Do you have confidence in the truth value of the results? Does the study contribute any meaningful evidence that can be used in nursing practice or that is useful to the nursing discipline?	1/1	-Findings appear to be trustworthy and valid. -Findings contribute meaningful evidence about the role of nurses in harm reduction.
Data relevance		1/2	
Total Score		/20	14.25/20

Gustafson, D.L., Goodyear, L., & Keough, F. (2008). When the dragon's awake: A needs assessment of people injecting drugs in a small urban centre. *International Journal of Drug Policy, 19*, 189-194.

Aspect of the Report	**Criteria**	**Score**	**Notes**
Title and abstract	Was the title a good one, suggesting the key phenomenon and the group or community under study? Does the abstract clearly and concisely	1/1	-Clear title. -Succinct abstract.

	summarize the main features of the report?		
Introduction			
Statement of the problem	Is the problem stated unambiguously, and is it easy to identify? Does the problem statement build a cogent and persuasive argument for the new study? Does the problem have significance in nursing? Is there a good match between the research problem, on the one hand, and the paradigm, traditions, and methods on the other?	1/1	-Problem stated clearly in the introduction paragraphs. -Problem statement builds a clear and persuasive argument for a needs assessment. -Problem and methods a good match.
Research questions	Are research questions explicitly stated? If not, is their absence justified? Are the questions consistent with the study's philosophical basis, underlying tradition, conceptual framework, or ideological orientation?	.5/1	-Research questions explicitly stated. -No explicit mention of conceptual framework used to guide study.
Literature review	Does the report adequately summarize the existing body of knowledge related to the problem or phenomenon of interest? Does the literature review provide a solid basis for the new study?	1/1	-Comprehensive literature review comprised of current primary sources provides background and solid basis for research.
Conceptual underpinnings	Are key concepts defined conceptually? Is the philosophical basis, underlying tradition, conceptual framework, or ideological orientation made explicit, and is it appropriate for the problem?	.5/1	-Assumes knowledge of injection drug use, illicit drugs etc. -Needs assessment appropriate for the research question and problem.

Method			
Protection of participants' rights	Were appropriate procedures used to safeguard the rights of study participants? Was the study subject to external review? Was the study designed to minimize risks and maximize benefits to participants?	.5/1	-Some explanation of measures to protect rights; research ethics board approval gained from both institutions. -Questionnaire portion did not address participants' concerns of anonymity.
Research design and tradition	Is the identified research tradition, if any, congruent with the methods used to collect and analyze data? Was an adequate amount of time spent in the field or with study participants? Did the design unfold in the field, giving researchers opportunities to capitalize on early understandings? Was there evidence of reflexivity in the design? Were there an adequate number of contacts with study participants?	1/1	-Four part mixed method design appropriate to gather data for needs assessment; survey, key informant and focus group interviews, environmental scan and community consultation. -Data collected over an adequate amount of time; 10 months.
Sample and setting	Was the group or population of interest adequately described? Were the setting and sample described in enough detail? Was the approach used to gain access to the site or to recruit participants appropriate? Was the best possible method of sampling used to enhance information richness and address the needs of the study?	.5/1	-Various groups of people of interest described. -Sample and setting described in adequate detail. -No explanation of approach to participant recruitment. -Findings confirmed through different methods. -Non probability sampling methods appropriate for research design.

	Was the sample size adequate? Was saturation achieved?		
Data collection	Were the methods of gathering data appropriate? Were the data gathered through two or more methods to achieve triangulation? Did the researcher ask the right questions or make the right observations, and were they recorded in an appropriate fashion? Was a sufficient amount of data collected? Were the data of sufficient depth and richness?	1/1	-Various data collection methods allowed triangulation of data. -Low response rate for questionnaires. Acknowledged in report. -Sufficient amount of data collected.
Procedures	Were data collection and recording procedures appropriate and adequately described? Were data collected in a manner that minimized bias or behavioural distortions? Were the staff who collected the data properly trained?	1/1	-Data collection and recording procedures described in detail. -Data collected in ways that minimized bias; findings validated between interviewers
Enhancement of rigour	Were methods used to enhance the trustworthiness of the data and analysis, and was the description of those methods adequate? Were the methods used to enhance credibility appropriate and sufficient? Did the researcher document research procedures and decision processes sufficiently, so that findings are auditable and confirmable?	1/1	-Methods used enhance credibility; many perspectives sought. -Findings validated with all groups.

Results			
Data analysis	Were the data management (eg, coding) and data analysis methods sufficiently described? Was the data analysis strategy compatible with the research tradition and with the nature and type of data gathered? Did the analysis yield an appropriate "product" (eg, theory, taxonomy, thematic pattern)? Did the analytic procedure suggest the possibility of biases?	1/1	-Data analysis methods described sufficiently. -Participants' own words used throughout report. -Analysis yielded appropriate product; needs assessment and barriers identified.
Findings	Were the findings effectively summarized, with good use of excerpts and supporting arguments? Do the themes capture the meaning of the data? Does it appear that the researcher conceptualized the themes or patterns in the data? Did the analysis yield an insightful, provocative, and meaningful picture of the phenomenon under investigation?	1/1	-Findings effectively summarized with support from literature. -Themes capture the meaning of the data.
Discussion			
Interpretation of findings	Are the findings interpreted within an appropriate frame of reference? Are major findings interpreted and discussed within the context of previous studies? Are the interpretations consistent with the study's limitations? Does the report address the issue of	.5/1	-Findings interpreted with support from literature and in context of nursing practice. -No mention of generalizability or limitations in the report.

	transferability of the findings?		
Implications/recommendations	Do the researchers discuss implications of the study for clinical practice or further inquiry, and are those implications reasonable and complete?	1/1	-Implications for nursing practice comprehensively described and supported by literature.
Global Issues			
Presentation	Was the report well-written, well-organized, and sufficiently detailed for critical analysis? Was the description of the methods, findings, and interpretations sufficiently rich and vivid?	1/1	-Well written and well organized report in sufficient detail.
Researcher credibility	Do the researchers' clinical, substantive, or methodologic qualifications and experience enhance confidence in the findings and their interpretation?	1/1	-Researchers' qualifications enhance credibility of findings.
Summary assessment	Do the study findings appear to be trustworthy? Do you have confidence in the truth value of the results? Does the study contribute any meaningful evidence that can be used in nursing practice or that is useful to the nursing discipline?	1/1	-Findings appear to be valid and trustworthy. -Contributes meaningful evidence.
Data relevance		1.5/2	
Total Score		17/20	

Hilton, B.A., Thompson, R., & Moore-Dempsey, L. (2009). Evaluation of the AIDS prevention street nurse program: One step at a time. *Canadian Journal of Nursing Research, 41*(1), 238-258.

Aspect of the Report	**Criteria**	**Score**	**Notes**
Title and abstract	Was the title a good one, suggesting	1/1	-Clear title and succinct abstract.

	the key phenomenon and the group or community under study? Does the abstract clearly and concisely summarize the main features of the report?		
Introduction			
Statement of the problem	Is the problem stated unambiguously, and is it easy to identify? Does the problem statement build a cogent and persuasive argument for the new study? Does the problem have significance in nursing? Is there a good match between the research problem, on the one hand, and the paradigm, traditions, and methods on the other?	1/1	-Problem stated clearly and background given. -Problem has significance to nursing practice.
Research questions	Are research questions explicitly stated? If not, is their absence justified? Are the questions consistent with the study's philosophical basis, underlying tradition, conceptual framework, or ideological orientation?	.5/1	-Research questions explicitly stated. -No mention of guiding theoretical framework.
Literature review	Does the report adequately summarize the existing body of knowledge related to the problem or phenomenon of interest? Does the literature review provide a solid basis for the new study?	1/1	-Brief literature review provided an overview of previous evaluations and identified areas for further investigations.
Conceptual underpinnings	Are key concepts defined conceptually? Is the philosophical basis, underlying	1/1	-Key concepts such as harm reduction defined conceptually.

	tradition, conceptual framework, or ideological orientation made explicit, and is it appropriate for the problem?		
Method			
Protection of participants' rights	Were appropriate procedures used to safeguard the rights of study participants? Was the study subject to external review? Was the study designed to minimize risks and maximize benefits to participants?	.5/1	-Participants gave written consent. Approval gained from the ethics review board. -Honorarium provided. -No mention of assuring clients that participation would not interfere with care received.
Research design and tradition	Is the identified research tradition, if any, congruent with the methods used to collect and analyze data? Was an adequate amount of time spent in the field or with study participants? Did the design unfold in the field, giving researchers opportunities to capitalize on early understandings? Was there evidence of reflexivity in the design? Were there an adequate number of contacts with study participants?	1/1	-Mixed methods approach congruent with data collection methods. -Adequate amount of time spent in the field; interviews ranged from 30 minutes to two hours. -Design unfolded in the field using the constant comparative method to identify themes. -Evidence of reflexivity and dialogue among researchers.
Sample and setting	Was the group or population of interest adequately described? Were the setting and sample described in enough detail? Was the approach used to gain access to the site or to recruit participants appropriate? Was the best possible method of	.5/1	-Groups adequately described. -Setting and sample described in detail. -Sampling methods included nonprobability. Appropriate for research design. -Adequate sample size. Although, no mention of the number of clients the program has. -Sample included current clients who volunteered, thus negative views of the program may be underrepresented;

	sampling used to enhance information richness and address the needs of the study? Was the sample size adequate? Was saturation achieved?		Acknowledged in the report.
Data collection	Were the methods of gathering data appropriate? Were the data gathered through two or more methods to achieve triangulation? Did the researcher ask the right questions or make the right observations, and were they recorded in an appropriate fashion? Was a sufficient amount of data collected? Were the data of sufficient depth and richness?	1/1	-Data collection methods appropriate. -Data triangulation achieved through multiple methods of data collection.
Procedures	Were data collection and recording procedures appropriate and adequately described? Were data collected in a manner that minimized bias or behavioural distortions? Were the staff who collected the data properly trained?	.5/1	-Measures taken to ensure auditability; clarifying the decision trail. -Data verified with other researchers and participants. -No mention of similar training methods among interviewers. -Possibility of bias as nurses took on role of interviewer. Social desirability.
Enhancement of rigour	Were methods used to enhance the trustworthiness of the data and analysis, and was the description of those methods adequate? Were the methods used to enhance credibility appropriate and sufficient? Did the researcher document research	1/1	-Section explaining enhancement of rigour and steps to ensure auditability, credibility and fittingness.

	procedures and decision processes sufficiently, so that findings are auditable and confirmable?		
Results			
Data analysis	Were the data management (eg, coding) and data analysis methods sufficiently described? Was the data analysis strategy compatible with the research tradition and with the nature and type of data gathered? Did the analysis yield an appropriate "product" (eg, theory, taxonomy, thematic pattern)? Did the analytic procedure suggest the possibility of biases?	1/1	-Data analysis methods sufficiently described. -Data analysis and open coding compatible with the research design. -Analysis yielded appropriate product.
Findings	Were the findings effectively summarized, with good use of excerpts and supporting arguments? Do the themes capture the meaning of the data? Does it appear that the researcher conceptualized the themes or patterns in the data? Did the analysis yield an insightful, provocative, and meaningful picture of the phenomenon under investigation?	1/1	-Findings summarized succinctly using participants own words. -Themes capture the meaning of the data. -Comprehensive analysis yielded a meaningful overview of the program.
Discussion			
Interpretation of findings	Are the findings interpreted within an appropriate frame of reference? Are major findings interpreted and discussed within the context of previous studies?	1/1	-Findings appropriately interpreted within a theoretical framework with support from literature. -Findings meaningful to nursing practice. -Acknowledged limitations in generalizability to other settings.

	Are the interpretations consistent with the study's limitations? Does the report address the issue of transferability of the findings?		
Implications/recommendations	Do the researchers discuss implications of the study for clinical practice or further inquiry, and are those implications reasonable and complete?	.75/1	-Implications for nursing practice identified. -Areas for future research not directly stated.
Global Issues			
Presentation	Was the report well-written, well-organized, and sufficiently detailed for critical analysis? Was the description of the methods, findings, and interpretations sufficiently rich and vivid?	1/1	-Report was well organized, well written and comprehensive. -Description of findings detailed and rich.
Researcher credibility	Do the researchers' clinical, substantive, or methodologic qualifications and experience enhance confidence in the findings and their interpretation?	1/1	-Researchers clinical and academic qualifications enhance confidence. -Peer reviewed.
Summary assessment	Do the study findings appear to be trustworthy? Do you have confidence in the truth value of the results? Does the study contribute any meaningful evidence that can be used in nursing practice or that is useful to the nursing discipline?	.75/1	-Findings appear to be trustworthy and valid. -Contributes meaningful evidence to policy and working with this unique population. -Questions to generalizability and attention to negative aspects of program.
Data relevance		2/2	
Total Score		17.5/20	

Ford, R., Bammer, G., & Becker, N. (2009). Improving nurses' therapeutic attitude to patients who use illicit drugs: Workplace drug and alcohol education is not enough. *International Journal of Nursing Practice, 15*(2), 112-118.

Section	**Notes**	**Score**
Problem statement and purpose	-Problem statement identifies relationship between two testable variables (effect of education on attitudes). -Title clear. -Abstract does not include methods. -Identifies the significance of the problem to nursing practice.	.75/1
Review of the literature and theoretical framework	-Literature review comprised of a large number of current primary sources. -Literature review provides context and explains the relationship between variables. However, it doesn't discuss the effect of negative attitudes from the perspective of the drug user. -Discusses research to date on the topic and identifies gap in research. -Conceptual framework of therapeutic attitudes briefly explained. States that it is explained in detail in another source. -Conceptual definitions provided.	.75/1
Hypotheses or research questions	-Research question and purpose explicated. -Hypothesis based on wide ranging research review discussed. -Hypothesis testable	1/1
Sample	-No discussion of how sample was selected. -Large sample (n=1605) -Sample representative of gender and age of nurses (female approx. 44 years old). -Sample may not be generalizable to all nurses in the community and other countries. Most worked in acute care but some were nurse midwives (a role not present in Canada).	.25/1
Research design	-Non-experimental cross sectional research design appropriate for research question. -Multivariable linear regression analysis was used to examine the association between attitudes and a number of personal/professional characteristics. -Appropriate for research question.	1/1
Internal validity	- History: another variable could have been responsible for the change in nurses' therapeutic attitudes. -Instrumentation: no measures of validity or reliability provided for the questionnaire used to gather data. -Selection bias: no discussion of how sample selected. Sample may not represent nurses in all practice areas or countries.	.5/1

	-Testing: social desirability of responses could skew results. No perspective of patients.	
External validity	-Selection effects: may not be generalizable to other nurses/practice areas. -Measurement effects: questionnaire may not accurately measure therapeutic attitude. -Reactive effects: social desirability of responses.	.5/1
Research approach	-Research approach appropriate for research questions. -Mixed method including observation and perspective of patient would have been helpful in triangulating data and determining therapeutic attitudes of nurses; may not have been feasible.	.75/1
Methods	-Data collection method: questionnaire. Appropriate for research design and feasibility. -Mixed methods design with observation and patient perspectives would have reduced reactive effects. -Report states data collection methods explained in detail in another source.	.5/1
Legal-ethical issues	-Ethical approval granted from institution board. -No mention of recruitment methods for sample or measures to protect confidentiality.	.75/1
Instruments	-Likert style questionnaire administered in keeping with conceptual definition.	1/1
Reliability and validity	-No measures of validity or reliability provided for instrument.	0/1
Analysis of data	-Data analysed using multivariable linear regression analysis using STATA program. -P value stated (<.001) and regression coefficients reported. -Tables used to enhance data analysis.	2/2
Conclusions, implications, and recommendations	-Clearly explains findings of study. -Identifies areas for further investigation. -Recommendations within the scope of findings. -Acknowledged limitations such as generalizability, selection bias, and lack of causality.	2/2
Application and utilization for nursing practice	-Relevant and feasible to apply to nursing practice.	2/2
Data Relevance		2/2
Total Score		15.75/20

Lovi, R., & Barr, J. (2009). Stigma reported by nurses related to those experiencing drug and alcohol dependency: A phenomenological Giorgi study. *Contemporary Nurse*, *33*(2), 166-178.

Aspect of the Report	**Criteria**	**Score**	**Notes**
Title and abstract	Was the title a good one, suggesting the key phenomenon and the group or community under study?	1/1	-Abstract and title clearly summarizes main features.

	Does the abstract clearly and concisely summarize the main features of the report?		
Introduction			
Statement of the problem	Is the problem stated unambiguously, and is it easy to identify? Does the problem statement build a cogent and persuasive argument for the new study? Does the problem have significance in nursing? Is there a good match between the research problem, on the one hand, and the paradigm, traditions, and methods on the other?	1/1	-Problem and purpose of study stated clearly in introduction. -Problem statement builds a persuasive argument for study. -Good match between conceptual underpinning and purpose.
Research questions	Are research questions explicitly stated? If not, is their absence justified? Are the questions consistent with the study's philosophical basis, underlying tradition, conceptual framework, or ideological orientation?	1/1	-Original research questions clearly stated. -Questions consistent with philosophical underpinning.
Literature review	Does the report adequately summarize the existing body of knowledge related to the problem or phenomenon of interest? Does the literature review provide a solid basis for the new study?	1/1	-Literature review presented what is known about topic. -Contains a large number of primary sources. -Lit review identifies gaps in research and purpose of study.
Conceptual underpinnings	Are key concepts defined conceptually? Is the philosophical basis, underlying tradition, conceptual framework, or ideological orientation made explicit, and is it appropriate for the problem?	1/1	-Theoretical framework described in detail and rationale for choosing. -Conceptual definitions provided for key concepts.
Method			
Protection of participants' rights	Were appropriate procedures used to safeguard the rights of study participants? Was the study subject to external review? Was the study designed to minimize risks and maximize benefits to participants?	1/1	-Ethics section. -Ethics approval granted by institution. -Detailed explanation of methods to protect participants' information and rights provided.
Research design	Is the identified research tradition, if any, congruent with the	1/1	-Research design congruent with data collection

and tradition	methods used to collect and analyze data? Was an adequate amount of time spent in the field or with study participants? Did the design unfold in the field, giving researchers opportunities to capitalize on early understandings? Was there evidence of reflexivity in the design? Were there an adequate number of contacts with study participants?		methods. -Data collection methods backed up by theoretical literature. -Data collection consisted of a number of in-depth interviews. Stated at least two; but no mention of exact number. -Design unfolded in the field and directed interview questions. -Evidence of reflexivity through explanation of bracketing method and use of field journals for all interviewers.
Sample and setting	Was the group or population of interest adequately described? Were the setting and sample described in enough detail? Was the approach used to gain access to the site or to recruit participants appropriate? Was the best possible method of sampling used to enhance information richness and address the needs of the study? Was the sample size adequate? Was saturation achieved?	1/1	-Sampling method described in detail. Consistent with theoretical framework. -Purposive sampling appropriate for design. -Inclusion criteria explained.
Data collection	Were the methods of gathering data appropriate? Were the data gathered through two or more methods to achieve triangulation? Did the researcher ask the right questions or make the right observations, and were they recorded in an appropriate fashion? Was a sufficient amount of data collected? Were the data of sufficient depth and richness?	.75/1	-Data collection method appropriate. -No methods to achieve triangulation. -Data collection methods and trustworthiness addressed. -Sufficient amount of data collected.
Procedures	Were data collection and recording procedures appropriate and adequately described? Were data collected in a manner that minimized bias or behavioural distortions? Were the staff who collected the data properly trained?	.75/1	-Data collection and recording procedures provided in detail. -Data collected in a manner that minimized bias (field journals and bracketing). -No mention of interview training.

Enhancement of rigour	Were methods used to enhance the trustworthiness of the data and analysis, and was the description of those methods adequate? Were the methods used to enhance credibility appropriate and sufficient? Did the researcher document research procedures and decision processes sufficiently, so that findings are auditable and confirmable?	.75/1	-Methods used to enhance the trustworthiness of data collection and analysis described. -Methods to enhance trustworthiness supported by theoretical literature. -Peer debriefings used. -No mention of validation with participants.
Results			
Data analysis	Were the data management (eg, coding) and data analysis methods sufficiently described? Was the data analysis strategy compatible with the research tradition and with the nature and type of data gathered? Did the analysis yield an appropriate "product" (eg, theory, taxonomy, thematic pattern)? Did the analytic procedure suggest the possibility of biases?	1/1	-Data analysis methods described in detail. -Data analysis compatible with research tradition. -Data analysis yielded appropriate product. -Measures taken to avoid bias detailed.
Findings	Were the findings effectively summarized, with good use of excerpts and supporting arguments? Do the themes capture the meaning of the data? Does it appear that the researcher conceptualized the themes or patterns in the data? Did the analysis yield an insightful, provocative, and meaningful picture of the phenomenon under investigation?	1/1	-Three major themes effectively summarized using a large number of participant quotes. -Themes capture meaning of data. -Analysis meaningful.
Discussion			
Interpretation of findings	Are the findings interpreted within an appropriate frame of reference? Are major findings interpreted and discussed within the context of previous studies? Are the interpretations consistent with the study's limitations? Does the report address the issue of transferability of the findings?	.75/1	-Interpretations discussed in context of previous studies and theoretical framework. -Interpretations consistent with limitations. -Acknowledges limitations including lack of generalizability and selection bias.
Implications/rec	Do the researchers discuss implications of the study for	1/1	-Discusses implications for practice within scope

ommendations	clinical practice or further inquiry, and are those implications reasonable and complete?		of issues to generalizability.
Global Issues			
Presentation	Was the report well-written, well-organized, and sufficiently detailed for critical analysis? Was the description of the methods, findings, and interpretations sufficiently rich and vivid?	1/1	-Report well organized and sufficiently detailed.
Researcher credibility	Do the researchers' clinical, substantive, or methodologic qualifications and experience enhance confidence in the findings and their interpretation?	1/1	-Researchers' academic background enhance trustworthiness.
Summary assessment	Do the study findings appear to be trustworthy? Do you have confidence in the truth value of the results? Does the study contribute any meaningful evidence that can be used in nursing practice or that is useful to the nursing discipline?	1/1	-Study appears to be trustworthy. -Confident in truth value of results. -Contributes meaningful evidence to nursing practice with people who inject drugs.
Data relevance		2/2	
Total Score		19/20	

Hilton, B.A., Thompson, R., Moore-Dempsey, L., & Hutchinson, K. (2001a). Urban outpost nursing: The nature of the nurses' work in the AIDS prevention street nurse program. *Public Health Nursing, 18*(4), 273-280.

Aspect of the Report	**Criteria**	**Score**	**Notes**
Title and abstract	Was the title a good one, suggesting the key phenomenon and the group or community under study? Does the abstract clearly and concisely summarize the main features of the report?	1/1	Title and abstract clear and concise.
Introduction			
Statement of the problem	Is the problem stated unambiguously, and is it easy to identify? Does the problem statement build a cogent and persuasive argument for the new study?	1/1	-Problem stated unambiguously in the introductory paragraphs. -Problem statement builds a persuasive argument for conducting the study. -Good match between question and qualitative method.

	Does the problem have significance in nursing? Is there a good match between the research problem, on the one hand, and the paradigm, traditions, and methods on the other?		
Research questions	Are research questions explicitly stated? If not, is their absence justified? Are the questions consistent with the study's philosophical basis, underlying tradition, conceptual framework, or ideological orientation?	1/1	-Goal of the study clearly stated including specific questions. -Questions consistent with qualitative design.
Literature review	Does the report adequately summarize the existing body of knowledge related to the problem or phenomenon of interest? Does the literature review provide a solid basis for the new study?	.75/1	-Brief literature reviewing outlining past evaluations of the program; identified gap in research. -Identified past studies to evaluate program, did not include key findings.
Conceptual underpinnings	Are key concepts defined conceptually? Is the philosophical basis, underlying tradition, conceptual framework, or ideological orientation made explicit, and is it appropriate for the problem?	.75/1	-Included a section describing the nurses' work. -Included brief definitions of key concepts. -Assumed some knowledge of concepts such as harm reduction, injection drug use, marginalisation etc.
Method			
Protection of participants' rights	Were appropriate procedures used to safeguard the rights of study participants? Was the study subject to external review? Was the study designed to minimize risks and maximize benefits to	1/1	-Informed consent from every participant. -Ethics review board granted from institution.

	participants?		
Research design and tradition	Is the identified research tradition, if any, congruent with the methods used to collect and analyze data? Was an adequate amount of time spent in the field or with study participants? Did the design unfold in the field, giving researchers opportunities to capitalize on early understandings? Was there evidence of reflexivity in the design? Were there an adequate number of contacts with study participants?	.75/1	-Mixed methods qualitative research design consisting of group interviews with key client groups and service providers; questionnaire administered to street nurses; key document analysis consistent with research questions and to gain a comprehensive perspective of program. -Sufficient amount of time spent in the field (interviews ranged from 30 minutes to 2 hours). -Second round of interviews with nurses for clarification; design unfolded in field. -No mention of how long it took to collect all data.
Sample and setting	Was the group or population of interest adequately described? Were the setting and sample described in enough detail? Was the approach used to gain access to the site or to recruit participants appropriate? Was the best possible method of sampling used to enhance information richness and address the needs of the study? Was the sample size adequate? Was saturation achieved?	.75/1	-Groups of interest adequately described. -Non probability sampling appropriate for research design. -No mention of how/why key service providers were selected. -Sample size adequate. -Sample selected by externally appointed evaluation advisory committee (EAC). -No mention of data saturation.
Data collection	Were the methods of gathering data appropriate? Were the data gathered through two or more methods to achieve triangulation? Did the researcher ask the right	1/1	-Data collection methods appropriate. -Mixed method design to achieve triangulation. -Guiding interview and questionnaire questions developed with the EAC; goals of questions explicated. -Key documents analyzed.

	questions or make the right observations, and were they recorded in an appropriate fashion? Was a sufficient amount of data collected? Were the data of sufficient depth and richness?		
Procedures	Were data collection and recording procedures appropriate and adequately described? Were data collected in a manner that minimized bias or behavioural distortions? Were the staff who collected the data properly trained?	.5/1	-Interview process adequately described. -Questionnaire and key document analysis briefly discussed; no in-depth description. -No mention of similar training for EAC; credentials given to enhance trustworthiness.
Enhancement of rigour	Were methods used to enhance the trustworthiness of the data and analysis, and was the description of those methods adequate? Were the methods used to enhance credibility appropriate and sufficient? Did the researcher document research procedures and decision processes sufficiently, so that findings are auditable and confirmable?	.5/1	-Data supported with numerous direct quotations by participants. -No section on enhancement of rigour. -No mention of validating findings with participants. -No mention of conflict of interest of EAC.
Results			
Data analysis	Were the data management (eg, coding) and data analysis methods sufficiently described? Was the data analysis strategy compatible with the research tradition and with the nature and type of data gathered?	.5/1	-Data analysis methods for interviews sufficiently described. -Data analysis methods for questionnaire and key documents not described in detail. -Data analysis consistent with research design.

	Did the analysis yield an appropriate "product" (eg, theory, taxonomy, thematic pattern)? Did the analytic procedure suggest the possibility of biases?		
Findings	Were the findings effectively summarized, with good use of excerpts and supporting arguments? Do the themes capture the meaning of the data? Does it appear that the researcher conceptualized the themes or patterns in the data? Did the analysis yield an insightful, provocative, and meaningful picture of the phenomenon under investigation?	1/1	-Findings and key themes effectively summarized. -Themes appear to capture meaning of the data. -Analysis yielded an insightful evaluation of the program from multiple perspectives.
Discussion			
Interpretation of findings	Are the findings interpreted within an appropriate frame of reference? Are major findings interpreted and discussed within the context of previous studies? Are the interpretations consistent with the study's limitations? Does the report address the issue of transferability of the findings?	1/1	-Findings interpreted with support from literature. -Major findings interpreted within context of previous studies.
Implications/recommendations	Do the researchers discuss implications of the study for clinical practice or further inquiry, and are those implications reasonable and complete?	.5/1	-Researchers do not discuss areas for further research. -Discuss implications and recommendations for clinical practice in the specific program.
Global Issues			
Presentation	Was the report well-written, well-	1/1	-Well written and well organized report.

	organized, and sufficiently detailed for critical analysis? Was the description of the methods, findings, and interpretations sufficiently rich and vivid?		-Overall, the sections of the report were sufficiently rich.
Researcher credibility	Do the researchers' clinical, substantive, or methodologic qualifications and experience enhance confidence in the findings and their interpretation?	1/1	-Researchers' clinical and academic qualifications enhance trustworthiness.
Summary assessment	Do the study findings appear to be trustworthy? Do you have confidence in the truth value of the results? Does the study contribute any meaningful evidence that can be used in nursing practice or that is useful to the nursing discipline?	1/1	-Findings appear to be trustworthy. -Study contributes meaningful evidence to nursing practice within this unique program.
Data relevance		1.5/2	
Total Score		16.5/20	

Pauly, B. (2008a). Shifting moral values to enhance access to health care: Harm reduction as a context for ethical nursing practice. *International Journal of Drug Policy, 19, 195-204.*

Aspect of the Report	**Criteria**	**Score**	**Notes**
Title and abstract	Was the title a good one, suggesting the key phenomenon and the group or community under study? Does the abstract clearly and concisely summarize the main features of the report?	1/1	
	Introduction		
Statement of the problem	Is the problem stated unambiguously, and is it easy to identify? Does the problem statement build a cogent and	1/1	-Explicit problem statement. -Applicable to nursing practice.

	persuasive argument for the new study? Does the problem have significance in nursing? Is there a good match between the research problem, on the one hand, and the paradigm, traditions, and methods on the other?		
Research questions	Are research questions explicitly stated? If not, is their absence justified? Are the questions consistent with the study's philosophical basis, underlying tradition, conceptual framework, or ideological orientation?	.5/1	
Literature review	Does the report adequately summarize the existing body of knowledge related to the problem or phenomenon of interest? Does the literature review provide a solid basis for the new study?	1/1	-comprehensive lit review.
Conceptual underpinnings	Are key concepts defined conceptually? Is the philosophical basis, underlying tradition, conceptual framework, or ideological orientation made explicit, and is it appropriate for the problem?	.75/1	-Larger ethnographic study. Little discussion of this study. -key concepts defined.
Method			
Protection of participants' rights	Were appropriate procedures used to safeguard the rights of study participants? Was the study subject to external review? Was the study designed to minimize risks and maximize benefits to participants?	1/1	-ethics approval granted from 2 organizations. -explicit mention of measures to protect confidentiality.
Research design and tradition	Is the identified research tradition, if any, congruent with the methods used to collect and analyze data? Was an adequate amount of time spent in the field or with study participants?	1/1	-ethnography and guiding theoretical perspectives explicated. -measures to ensure reflexivity discussed.

	Did the design unfold in the field, giving researchers opportunities to capitalize on early understandings? Was there evidence of reflexivity in the design? Were there an adequate number of contacts with study participants?		
Sample and setting	Was the group or population of interest adequately described? Were the setting and sample described in enough detail? Was the approach used to gain access to the site or to recruit participants appropriate? Was the best possible method of sampling used to enhance information richness and address the needs of the study? Was the sample size adequate? Was saturation achieved?	.75/1	-sample could be described in more detail. -recruitment appropriate. -large sample size.
Data collection	Were the methods of gathering data appropriate? Were the data gathered through two or more methods to achieve triangulation? Did the researcher ask the right questions or make the right observations, and were they recorded in an appropriate fashion? Was a sufficient amount of data collected? Were the data of sufficient depth and richness?	1/1	-Data collection measures detailed extensively. -multiple methods to achieve triangulation. -Data collected over a long period of time and interviews/observation were extensive.
Procedures	Were data collection and recording procedures appropriate and adequately described? Were data collected in a manner that minimized bias or behavioural distortions? Were the staff who collected the data properly trained?	1/1	-recording procedures adequately described.
Enhancement of rigour	Were methods used to enhance the	1/1	-Discussed how dependability of data was

	trustworthiness of the data and analysis, and was the description of those methods adequate? Were the methods used to enhance credibility appropriate and sufficient? Did the researcher document research procedures and decision processes sufficiently, so that findings are auditable and confirmable?		enhanced. -Discussed member checking
Results			
Data analysis	Were the data management (eg, coding) and data analysis methods sufficiently described? Was the data analysis strategy compatible with the research tradition and with the nature and type of data gathered? Did the analysis yield an appropriate "product" (eg, theory, taxonomy, thematic pattern)? Did the analytic procedure suggest the possibility of biases?	1/1	-Data analysis extensively detailed. -compatible with ethnography and theoretical perspectives
Findings	Were the findings effectively summarized, with good use of excerpts and supporting arguments? Do the themes capture the meaning of the data? Does it appear that the researcher conceptualized the themes or patterns in the data? Did the analysis yield an insightful, provocative, and meaningful picture of the phenomenon under investigation?	1/1	-Findings summarized effectively with use of quotes to support. -Themes capture meaning of the data.
Discussion			
Interpretation of findings	Are the findings interpreted within an appropriate frame of reference? Are major findings interpreted and discussed within the context of previous studies? Are the interpretations consistent with the	1/1	-Findings discussed in relation to other studies. -Consistent with other research.

	study's limitations? Does the report address the issue of transferability of the findings?		
Implications/recommendations	Do the researchers discuss implications of the study for clinical practice or further inquiry, and are those implications reasonable and complete?	.75/1	-Discussed recommendations and areas for further research.
Global Issues			
Presentation	Was the report well-written, well-organized, and sufficiently detailed for critical analysis? Was the description of the methods, findings, and interpretations sufficiently rich and vivid?	1/1	
Researcher credibility	Do the researchers' clinical, substantive, or methodologic qualifications and experience enhance confidence in the findings and their interpretation?	1/1	
Summary assessment	Do the study findings appear to be trustworthy? Do you have confidence in the truth value of the results? Does the study contribute any meaningful evidence that can be used in nursing practice or that is useful to the nursing discipline?	1/1	
Data relevance		1.75/2	
Total Score		18.5/20	

Ben Natan, M.B., Beyil, V., & Neta, O. (2009). Nurses' perception of the quality of care they provide to hospitalized drug addicts: Testing the Theory of Reasoned Action. International Journal of Nursing Practice, 15, 566-573.

Section	**Notes**	**Score**
Problem statement and purpose	-Problem clearly stated in introduction section. -Purpose alluded to throughout introduction section (no study has examined components influencing intended and actual quality of care…). Explicitly stated purpose would provide more clarity.	.5/1

	-Identifies variables to be studied and relationships (nurses' attitudes and subjective norms and intended and actual care of drug users). -Little explanation of what subjective norms entail or how quality of care is defined.	
Review of the literature and theoretical framework	-Literature review places the variables (nurses' attitudes) within a framework (Theory of Reasoned Action). -No mention of search terms or conceptual/operational definitions included in the literature review. -Limited literature review (8 articles). 7 primary sources, 1 secondary. Few articles with nursing focus. -Literature review states attitudes towards this population have received scant research attention. In my search, much more research was found on attitudes towards drug users.	.5/1
Hypotheses or research questions	-Research questions explicitly stated. Visual aid based on TRA provided. -Hypotheses based on TRA.	1/1
Sample	-Sufficient sample size identified (135 nurses) -Non probability convenience sample: questionnaire mailed to 200 nurses working in 3 medical centres in internal medicine. -Sample reflects the population of interest (RNs) -Sample may not be generalizable to nurses globally (almost exclusively married women in Israel, working in internal medicine, educational requirements for RN not explained, nonprobability sample)	.5/1
Research design	-Quasi-experimental correlational design used. -Appropriate design based on current research to date. A qualitative exploratory design would also be appropriate. -correlational design appropriate with research problem, theoretical framework, literature review and hypothesis.	1/1
Internal validity	-Due to the nature of a quasi-experimental design, threats to internal validity exist. -History: many events other than subjective norms or nurses' attitudes could be responsible for the quality of care (ex: patient demographic, hospital policies etc.) -Instrumentation: questionnaires were self-reported. Favourable responses could have occurred. -Selection bias: nonprobability sample. Little exclusion criteria mentioned. No control group.	.5/1
External validity	Selection effects: may not be generalizable to other cultures, male nurses, new nurses, nurses in community settings (Non probability sample, primarily married women in late 30's from	.5/1

	Israel working for 15 years). -Reactive effects: self-report questionnaires, may provide favourable responses when discussing quality of care provided.	
Research approach	-research approach fits with purpose of the study. -qualitative design would have been a good fit.	1/1
Methods	-Data collection method: questionnaire based on TRA. -Same data collection method for each participant.	1/1
Legal-ethical issues	-Ethical considerations explicated. -Rights of participants considered	1/1
Instruments	-Likert scale questionnaire based on TRA. -Developed by researchers. -Measures independent and dependant variables. -Consistent with theoretical framework and research design. -Pilot tested. -Questionnaire explained in detail. -Quality of care provided self-reported using Likert scale, no methods of testing for social desirability noted. -No mention of whether participants fully understood questionnaire.	.5/1
Reliability and validity	-Cronbach's alpha >.7 stated for 2/3 measure variables. -No mention of reliability measure for quality care variable. -No mention of validity of questionnaire.	.5/1
Analysis of data	-Appropriate descriptive statistics were provided on each variable. -Pearson correlation coefficients reported. -Regression analyses reported. -Tables used to expand on text.	2/2
Conclusions, implications, and recommendations	-Results interpreted in the context of problem and theoretical framework (Concluded that the TRA for understanding nurses' intentions and attitudes partially supported by findings.) -Discussed application to nursing practice and recommendations. -Actions not supported by evidence, fail to recognize influence of socio-political values. -Discussed limitations of study (self-report, social desirability). -Does not make recommendations for future research.	1.5/2
Application and utilization for nursing practice	-Questions of generalizability based on participant demographics. -Study appears to be mostly valid (attitudes, subjective norms influence intent to provide high	1/2

	quality of care to drug users). -Questionable whether non-established link between attitude and actual behaviour is valid due to self-report, lack of credible instrument to measure, etc. -More research is needed about the cause of nurses' attitudes in order to recommend actions.	
Data Relevance		1/2
Total Score		14/20

Peckover, S., & Chidlaw, R.G. (2007). Too frightened to care? Accounts by district nurses working with clients who misuse substances. Health and Social Care in the Community, 15(3), 238-245.

Aspect of the Report	**Criteria**	**Score**	**Notes**
Title and abstract	Was the title a good one, suggesting the key phenomenon and the group or community under study? Does the abstract clearly and concisely summarize the main features of the report?	.75/1	-organization of abstract.
Introduction			
Statement of the problem	Is the problem stated unambiguously, and is it easy to identify? Does the problem statement build a cogent and persuasive argument for the new study? Does the problem have significance in nursing? Is there a good match between the research problem, on the one hand, and the paradigm, traditions, and methods on the other?	1/1	
Research questions	Are research questions explicitly stated? If not, is their absence justified? Are the questions consistent with the	.5/1	-Research questions stated. -No discussion of theoretical underpinning.

	study's philosophical basis, underlying tradition, conceptual framework, or ideological orientation?		
Literature review	Does the report adequately summarize the existing body of knowledge related to the problem or phenomenon of interest? Does the literature review provide a solid basis for the new study?	1/1	-Lit review summarized existing research.
Conceptual underpinnings	Are key concepts defined conceptually? Is the philosophical basis, underlying tradition, conceptual framework, or ideological orientation made explicit, and is it appropriate for the problem?	1/1	-Key concepts defined. -qualitative method discussed; appropriate for research question.
Method			
Protection of participants' rights	Were appropriate procedures used to safeguard the rights of study participants? Was the study subject to external review? Was the study designed to minimize risks and maximize benefits to participants?	1/1	-Discussion of ethical considerations and measures to ensure confidentiality.
Research design and tradition	Is the identified research tradition, if any, congruent with the methods used to collect and analyze data? Was an adequate amount of time spent in the field or with study participants? Did the design unfold in the field, giving researchers opportunities to capitalize on early understandings?	.75/1	-Brief discussion of time spent. -Constant comparison method discussed. -Methods congruent with research approach.

	Was there evidence of reflexivity in the design? Were there an adequate number of contacts with study participants?		
Sample and setting	Was the group or population of interest adequately described? Were the setting and sample described in enough detail? Was the approach used to gain access to the site or to recruit participants appropriate? Was the best possible method of sampling used to enhance information richness and address the needs of the study? Was the sample size adequate? Was saturation achieved?	.25/1	-Sample briefly discussed. -No mention of exclusion criteria. -small sample. -no discussion of education level.
Data collection	Were the methods of gathering data appropriate? Were the data gathered through two or more methods to achieve triangulation? Did the researcher ask the right questions or make the right observations, and were they recorded in an appropriate fashion? Was a sufficient amount of data collected? Were the data of sufficient depth and richness?	.5/1	-Data collection measures appropriate. -Could have discussed data saturation.
Procedures	Were data collection and recording procedures appropriate and adequately described?	.75/1	-Collection methods described. -No mention of interviewer training.

	Were data collected in a manner that minimized bias or behavioural distortions? Were the staff who collected the data properly trained?		
Enhancement of rigour	Were methods used to enhance the trustworthiness of the data and analysis, and was the description of those methods adequate? Were the methods used to enhance credibility appropriate and sufficient? Did the researcher document research procedures and decision processes sufficiently, so that findings are auditable and confirmable?	.75/1	-Methods to enhance rigour briefly discussed.
Results			
Data analysis	Were the data management (eg, coding) and data analysis methods sufficiently described? Was the data analysis strategy compatible with the research tradition and with the nature and type of data gathered? Did the analysis yield an appropriate "product" (eg, theory, taxonomy, thematic pattern)? Did the analytic procedure suggest the possibility of biases?	.5/1	-Brief discussion of data analysis methods.
Findings	Were the findings effectively summarized, with good use of excerpts and supporting arguments? Do the themes capture the meaning of the data?	1/1	-Findings effectively summarized. -Themes supported with quotes.

	Does it appear that the researcher conceptualized the themes or patterns in the data? Did the analysis yield an insightful, provocative, and meaningful picture of the phenomenon under investigation?		
Discussion			
Interpretation of findings	Are the findings interpreted within an appropriate frame of reference? Are major findings interpreted and discussed within the context of previous studies? Are the interpretations consistent with the study's limitations? Does the report address the issue of transferability of the findings?	1/1	-Themes interpreted with support from current research. -Report identifies limitations in generalizability due to small sample
Implications/recommendations	Do the researchers discuss implications of the study for clinical practice or further inquiry, and are those implications reasonable and complete?	1/1	
Global Issues			
Presentation	Was the report well-written, well-organized, and sufficiently detailed for critical analysis? Was the description of the methods, findings, and interpretations sufficiently rich and vivid?	.75/1	
Researcher credibility	Do the researchers' clinical, substantive, or methodologic qualifications and experience enhance confidence in the findings and their interpretation?	.75/1	

Summary assessment	Do the study findings appear to be trustworthy? Do you have confidence in the truth value of the results? Does the study contribute any meaningful evidence that can be used in nursing practice or that is useful to the nursing discipline?	1/1	
Data relevance		1.75/2	
Total Score		16/20	

Happell, B., & Taylor, C. (2001). Negative attitudes towards clients with drug and alcohol related problems: Finding the elusive solution. Australian and New Zealand Journal of Mental Health Nursing, 10, 87-88.

Section	**Notes**	**Score**
Problem statement and purpose		1/1
Review of the literature and theoretical framework	-comprehensive literature review.	1/1
Hypotheses or research questions	-explicit research question.	1/1
Sample	-sample not described in detail. -small sample size in only one hospital.	.25/1
Research design	-Correlational, cross sectional study appropriate to measure the effect of liaison service on attitudes, confidence and perceived knowledge.	1/1
Internal validity	-Measures to ensure validity explicitly discussed. Threats to internal validity: -History: another variable could have been responsible for the change in nurses' therapeutic attitudes.	.5/1

	-Instrumentation: Cronbach's alpha .9 and questionnaire pilot tested. -Selection bias: small sample size from 1 hospital. Sample may not represent nurses in all practice areas or countries. -Testing: social desirability of responses could skew results. No perspective of patients.	
External validity	-Selection effects: may not be generalizable to other nurses/practice areas. -Reactive effects: social desirability of responses.	.5/1
Research approach	-Research approach fits with purpose of the study. -Qualitative design could be more helpful in determining effect of liaison service on attitudes.	.75/1
Methods	-Data collected using a questionnaire. -No record kept of advice given by liaison service.	.75/1
Legal-ethical issues	-Ethical approval granted.	1/1
Instruments	-Likert format for 3 questionnaires. Appropriate. -Patient responses could have enhanced data collection and triangulation of data.	.5/1
Reliability and validity	-Cronbach's alpha .9 for questionnaires.	1/1
Analysis of data	-Data analysed using ANOVA -P values provided; alpha not set. -Tables used to enhance data analysis.	1.5/2
Conclusions, implications, and recommendations	-Confidence and attitudes were not statistically significant; but perceived knowledge was statistically significant. -Explicitly describes limitations to results due to poor response rate. -Conclusions in keeping with data analysis; recommendations	1.5/2

	within scope of results.	
Application and utilization for nursing practice	-Discusses application to practice -Identifies areas for further research.	1.5/2
Data Relevance		1.75/2
Total Score		15.5/20

Rassool, G.H., & Oyefeso, A. (2007). Predictors of course satisfaction and perceived course impact of addiction nurses undertaking a postgraduate diploma in addictive behavior. *Nurse Education Today, 27*(3), 256 -265.

Section	**Notes**	**Score**
Problem statement and purpose	-Problem statement identifies relationship between testable variables -Title and abstract clear. -Identifies significance of the problem to nursing practice.	1/1
Review of the literature and theoretical framework	-Literature review comprised of a large number of current primary sources. -Literature review provides context. Could have discussed the relationship between variables in light of theoretical framework. -Discusses research to date on the topic and identifies gap in research. - lack of conceptual framework	.5/1
Hypotheses or research questions	-Research question and purpose explicated. -Hypothesis testable	1/1
Sample	-Sample and selection methods discussed. -Convenience sample (n=46) -Education, gender or other characteristics representative of nurses. -Sample may not be generalizable to nurses in every workplace as sample was undergoing a post grad diploma in addictions and working in addictions nursing.	.5/1
Research design	-Non-experimental cross sectional research design appropriate for research question. -Multivariable linear regression analysis was used to examine the association between attitudes and a number of personal/professional characteristics. -Appropriate design for research question.	1/1
Internal validity	- History: another variable could have been responsible for the change in nurses' therapeutic attitudes.	.5/1

	-Instrumentation: measures of internal validity provided for questionnaires. -Selection bias: Sample may not represent nurses in all practice areas or countries. -Testing: social desirability of responses could skew results.	
External validity	-Selection effects: may not be generalizable to other nurses/practice areas. -Reactive effects: social desirability of responses.	.5/1
Research approach	-Research approach appropriate for research questions. -Mixed method including observation and perspective of patient would have been helpful in triangulating data and determining therapeutic attitudes of nurses. -Discussion of other methods to evaluate course (briefly mentioned) could have enhanced the data.	.75/1
Methods	-Data collection method: questionnaire. Appropriate for research design and feasibility. -Mixed methods design with observation and patient perspectives would have reduced reactive effects.	.75/1
Legal-ethical issues	-No ethical approval deemed necessary from institution. Reported measures to ensure confidentiality. -Consent given by participants.	.5/1
Instruments	-Likert style questionnaire with measures of internal validity.	1/1
Reliability and validity	-Measures of validity and reliability provided for instrument.	1/1
Analysis of data	-Data analysed using multiple regression analysis and independent t-tests using SPSS. -P value stated. -Tables used to enhance data analysis.	2/2
Conclusions, implications, and recommendations	-Clearly explains findings of study. -Identifies areas for further investigation. -Recommendations within the scope of findings. -Acknowledged limitations such as generalizability.	1.75/2
Application and utilization for nursing practice	-Relevant and feasible to apply to nursing practice.	1.5/2
Data Relevance		1.5/2
Total Score		15.75/20

Rassool, G.H., & Rawaf, S. (2008). Predictors of educational outcomes of undergraduate nursing students in alcohol and drug education. *Nurse Education Today, 28*(6), 691 -701

Section	Notes	Score
Problem statement and purpose	-Problem statement identifies relationship between testable variables -Title and abstract clear.	1/1
Review of the literature and theoretical framework	-Identifies significance of the problem to nursing practice. -Literature review comprised of a large number of current primary sources. -Literature review provides context. Could have discussed the relationship between variables in light of theoretical framework. -Discusses research to date on the topic and identifies gap in research. - Does not identify conceptual framework	.75/1
Hypotheses or research questions	-Research question and purpose explicated. -Hypothesis testable	1/1
Sample	-Purposive sample and selection methods discussed. -Adequate sample size (n=110) from 3 institutions. -Inclusion criteria and characteristics explicated -May not be generalizable to all nursing students because these students chose the mental health rotation.	.75/1
Research design	-Quasi-experimental pre and post-test research design appropriate for research question.	1/1
Internal validity	-History: another variable could have been responsible for the change in nurses' knowledge, attitudes and skills. -Instrumentation: measures of internal validity provided for questionnaires. -Maturation: changes could be due to other factors. -Selection bias: Sample may not represent student nurses in all practice areas or countries. -Testing: multiple tests could affect results.	.5/1
External validity	-Selection effects: may not be generalizable to other student nurses. -Reactive effects: effect of multiple tests. -Measurement effects: changes may be attributed to maturation and other factors.	.5/1

Research approach	-Research approach appropriate for research questions. -Mixed method including observation and interviews could have enhanced findings.	.75/1
Methods	-Data collection method: questionnaire. -Appropriate for research design and feasibility. -Mixed methods design with observation and patient perspectives could have reduced reactive effects.	.75/1
Legal-ethical issues	-Ethical approval granted from external board. -Reported measures to ensure confidentiality.	1/1
Instruments	-Likert style questionnaires with measures of internal validity provided.	1/1
Reliability and validity	-Measures of validity and reliability provided for instrument.	1/1
Analysis of data	-Data analysed using paired t-tests and analysis of covariance using SPSS. -P value stated <.05 -Tables used to enhance data analysis.	1.75/2
Conclusions, implications, and recommendations	-Clearly explains findings of study. -Identifies areas for further investigation. -Recommendations within the scope of findings. -Acknowledged limitations such as generalizability.	1.5/2
Application and utilization for nursing practice	Relevant and feasible to apply to nursing practice	1.75/2
Data Relevance		1.75/2
Total Score		16.75/20