THE PROCESS OF SAFER CRACK USE AMONGST WOMEN IN VANCOUVER'S DOWNTOWN EASTSIDE

by

Ingrid Emilia Handlovsky

B.Sc., McMaster University, 2003 B.Sc.N., University of Toronto 2006

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF SCIENCE IN NURSING

THE FACULTY OF GRADUATE STUDIES

THE UNIVERSITY OF BRITISH COLUMBIA

(Vancouver)

June, 2011

© Ingrid Emilia Handlovsky, 2011

ABSTRACT

Crack cocaine is prevalent in Vancouver's Downtown Eastside, with evidence suggesting women use more than men. Crack cocaine poses many harms to the body, and women face unique harms due to the gendered use of crack. However, there has been little investigation into how women go about minimizing some of the harms associated with crack. Informed by harm reduction and women's-centred philosophies, a grounded theory approach was employed to explore the process that women engage in to limit the physical, psychological and interpersonal harms associated with crack use, as well as identify the social, economic and political factors that influence the process of safer use. Data were collected via seven group interviews (n=27) that took place over a three month period with women who were actively using crack cocaine.

Data illustrated women's crack use patterns shifted over time from heavier to more intermittent use, and four central processes that enabled women to practice safer crack use were identified. At the root of these processes was a dedication to care for the self and others. The processes were identified as: establishing a safe physical space, building trusting relationships, learning about safer crack use, and accessing safer use equipment. These strategies were in turn influenced by larger contextual factors including the spatial environment (violence and police activity), economics (living with extreme financial limitations) and politics (the instability of supportive housing and lack of safe places for women).

Women demonstrated proficiency to care for themselves and others in the context of crack use, but many changes within the political and health care systems are necessary to facilitate safer practices to improve health outcomes. Firstly, a political agenda that is dedicated to the development of supportive housing is essential for safer use, as is greater access to income assistance. Furthermore, harm reduction programming that focuses on women's contributions

and expertise in the realm of safer use is essential to ongoing development of a supportive community of women. Moreover, the availability of safer use equipment is quintessential for women to apply knowledge regarding safer crack use to minimize some of the harms associated with crack.

PREFACE

This thesis was granted ethical approval by the University of British Columbia Behavioural Research Ethics Board, certificate number: H10-02299.

TABLE OF CONTENTS

ABSTRACT	ii
PREFACE	iv
TABLE OF CONTENTS	v
LIST OF TABLES	vii
ACKNOWLEDGEMENTS	viii
DEDICATION	ix
CHAPTER ONE: SITUATING THE ISSUE	1
Introduction	1
Thesis Overview	5
CHAPTER TWO: REVIEW OF THE LITERATURE	7
Introduction	7
The Harms of Crack Cocaine Use	7
Gender and Crack Cocaine Use	11
Women's Safer Crack Use Practices	15
Harm Reduction Programming for Safer Crack Use	15
Women's Safer Crack Use During Pregnancy	16
Factors Influencing Women's Safer Crack Use	18
Environment	18
Violence	20
Availability of Equipment	21
Summary	22
CHAPTER THREE: RESEARCH DESIGN AND APPROACH	24
Introduction	24
Methodology	25
Grounded Theory	25
Harm Reduction Theoretical Perspectives	27
A Women's Centred Approach to Research	28
Sample	29
Setting	30
Data Collection	31
Data Analysis	33
Ethical Considerations.	35
Informed Consent	36

Group Interviews	36
Confidentiality	37
Respectful Research Relationships	38
Financial Honorariums	39
Rigor	39
Usefulness of the Research	42
CHAPTER FOUR: FINDINGS	44
Introduction	44
Situating the Participants	44
Patterns of Crack Use	46
Theorizing about Safer Crack Use	50
Caring	51
Caring for Self and Others by Establishing a Safe, Personal Place	53
Caring for Self and Others by Building Trusting Relationships	56
Learning about Safer Crack Use to Care for the Self and Others	59
Personal Experience	60
Informal Learning	62
Formal Learning	67
Accessing Safer Use Equipment to Care for the Self and Others	69
Summary	74
CHAPTER FIVE: DISCUSSION AND RECOMMENDATIONS	75
Introduction	75
Summary of Key Findings	75
Discussion	77
Recommendations	82
Building on Women's Proficiency and Increasing Equipment Availability	82
Women's-Centred Services	83
The Importance of Place	86
Conclusion	88
REFERENCES	90
APPENDIX A: CONSENT FORM	101
APPENDIX B: RECRUITMENT FLYER	102
APPENDIX C: INTERVIEW GUIDE	103

LIST OF TABLES

TABLE 1	Descriptive Characteristics of Study Participants	45

ACKNOWLEDGEMENTS

I would like to express my deepest thanks to the women who took part in this project. Without your contributions, this work would not have been possible. Your empathy, respect and courage are truly humbling as is your commitment to caring for one another and building a supportive community.

I am forever indebted to my supervisor, Vicky Bungay, and committee members Joy Johnson and Craig Phillips. Vicky's seemingly endless capacity to provide support and guidance throughout this journey is what has made the final product possible. I am grateful for her ability to facilitate students to push the boundaries of their thinking while providing support at the times it was most needed. I also believe her emphasis on establishing balance while engaging in work is what has made this accomplishment a reality. I would like to thank Joy Johnson for her expertise and assistance with bringing the pieces of the theory together. I am grateful for her enthusiasm and insight to the research question, and her encouragement to explore how concepts fit together. I am grateful to J. Craig Phillips for his impeccable analytical eye, and his dedication to ensuring this project was rigourous and achieved what it set out to do. I am greatly appreciative of the time each member took to thoughtfully examine the work, and provide feedback whenever necessary.

I cannot stress enough how the support of my husband, Marc, has made this entire project possible. He has been with me every step of the way. I could not have achieved this without him.

For my family, my parents Luba and Peter and my brothers, Robert and Patrick, who have been here for me not only the duration of this work but throughout the course of my whole life. It is because of your encouragement, and your example, that this achievement was possible.

For my Mom and Dad

Som navždy vďačný, že ste

CHAPTER ONE: SITUATING THE ISSUE

Introduction

Crack cocaine use in North America is on the rise, particularly with regards to individuals residing in impoverished, inner-city neighbourhoods (Lejuez, Bornovalova, Reynolds & Daughters, 2007; Leonard, DeRubeis, Pelude, Medd, Birkett & Seto, 2007) and evidence suggests that women are using at greater rates than their male counterparts (CHASE Project Team, 2005; Lejuez et al, 2007). There are a number of inherent problems associated with crack use including finger, lip, mouth and throat burns (Boyd, Johnson & Moffat, 2008; Malchy, Bungay & Johnson, 2008), respiratory and cardiac complications (Butters & Erickson, 2003) and spread of infections (e.g. HCV, HIV) through the sharing of equipment such as crack pipes (Fischer, Powis, Cruz, Rudzinski, & Rehm, 2008; Leonard et al, 2007) but a growing body of literature also exists that suggests crack use is "gendered" with women using the substance differently than men. As a result, there are additional harms associated with crack use that are unique to women. These gender specific harms include the fact that women often lack their own equipment, (thereby inhibiting safer use), are frequently second to use a pipe (thereby facilitating exposure to infection) and are many times unable to obtain their own supply of crack (SCORE project, 2007). Additionally, many women who use crack cocaine within indigent neighbourhoods are involved in the sex industry, and are exposed to additional violence and social stigma as well as the expectation to supply men with crack (SCORE project).

At present little is known about how women go about minimizing the numerous harms associated with crack and how the factors that serve to impede or facilitate these efforts play out. What is known about women's safer crack use practices is situated within the context of harm reduction programming and services (Boyd, Johnson and Moffat, 2008; Bungay, Johnson, Boyd,

Malchy, Buxton, Loudfoot, 2009; Bungay, Varcoe, Johnson & Boyd, 2010; Leonard, DeRubeis, Pelude, Medd, Birkett & Seto, 2007; Malchy, Bungay & Johnson, 2008; SCORE Project, 2007). The literature demonstrates that women want to minimize the risks associated with crack, and access harm reduction programming and services to facilitate with limiting harms (Bungay et al 2009; Bungay et al, 2010; SCORE Project). Findings also document women's involvement in community programming aimed at reducing the harms of crack cocaine (SCORE Project). However, much of this research has not been exclusive to women (Boyd et al, 2008; Leonard et al, 2007; Malchy et al, 2008; SCORE Project).

Outside the focus of harm reduction programming there is some research into how women minimize the harms of crack cocaine, but this inquiry is specific to pregnancy (Kearney, Murphy, Irwin & Rosenbaum, 1995; Murphy & Rosenbaum, 1999). This literature sheds light on the safer crack use practices of expectant mothers, describing these practices as health management strategies which have included taking vitamins, eating well, getting plenty of sleep, and decreasing overall crack use (Murphy & Rosenbaum). This research has demonstrated that women who use crack in the context of pregnancy make a vested effort to promote the health of the developing fetus, but how women minimize some of the harms associated with crack in the general context of women's health remains largely unknown.

The many factors that impact safer crack use practices have also been explored in the literature, but much of this information pertains to injection drug use with little focus specifically on women. The work of Rhodes, Singer, Bourgois, Friedman & Strathdee (2007) examined the influence of the "risk environment" on vulnerability to HIV risk. The risk environment was defined as the space, whether social or physical, where a variety of exogenous factors interact to increase vulnerability to HIV (Rhodes et al, 2007). Additional work illustrated the impact of

neighbourhood social unrest such as violence, assault, burglary and policing on vulnerability and HIV transmission (Latkin, Williams, Wang & Curry, 2005; Maas, Fairbairn, Kerr, Li, Montaner & Wood, 2007). Additional inquiry has focused exclusively on the impact of violence and policing as an environmental-structural barrier to safer practices with injection drug use (Shannon, Rusch, Shoveller, Alexson, Gibson, & Tyndall, 2008). Studies pertaining to women and crack use have also highlighted violence as a barrier to women's ability to practice safer use (Bungay, Johnson, Boyd, Malchy, Buxton & Loudfoot, 2009; Bungay, Johnson, Varcoe & Boyd, 2010; SCORE Project, 2007). Further investigation into the impact of macro factors including unemployment, poverty, racism and sexism specific to women's crack use practices has also been carried out (Bungay, et al, 2010).

The literature also notes factors that facilitate the ability to practice safer drug use, but once again much of this research has focused on injection drugs, and is not specific to women. Access and availability of equipment has been highlighted as instrumental to minimizing harms in the context of injection drug as well as crack use (City of Ottawa Public Health Safer Crack Use Initiative, 2006; Leonard, DeRubeis, Pelude, Medd, Birkett & Seto, 2007; Ontario's Needle Exchange Programs Best Practice Recommendations, 2006; SCORE Project, 2007). Developing relations of care and reciprocity within communities as a means to enhance safer drug use practices has also been investigated (Duff, 2006). Research in Vancouver's downtown eastside (DTES) in this vein has emphasized that creating supportive networks amongst women where information is shared and women emotionally encourage each other is essential to promoting safer use practices (Bungay, Johnson, Boyd, Malchy, Buxton & Loudfoot, 2009; Bungay, Johnson, Varcoe & Boyd, 2010; SCORE Project). The development of women-centred

programming has been documented as crucial in facilitating safer use practices for women living in the DTES (Bungay et al, 2010; SCORE Project).

At present, however, research that explicitly examines how women engage in safer crack use as well as the factors that impact safer use remains scarce. Developing an understanding as to how women engage in safer crack use is essential based on the rise in crack use by women, coupled with the knowledge that women experience particular harms associated with use. This research is highly relevant to nursing as the profession is dedicated to facilitating health promotion and maintenance of all citizens (Canadian Nurses Association, 2008) a statement supported by the Canada Health Act (Canada Health Act Annual Report, 2009). To truly abide by egalitarian values, as emphasized in the Canada Health Act and nursing code of ethics, the needs of vulnerable populations must be addressed. A vulnerable population, for the purposes of this research, refers to a subgroup that due to shared social characteristics (such as poverty, ethnicity, gender) is at greater "risk of risks" (Frolich & Potvin, 2008). By gaining insight into the approaches and strategies women employ to minimize some of the harms associated with crack cocaine, nurses have the opportunity to facilitate women's health by supporting these strategies and approaches.

To date there has not been a study conducted in the DTES to determine specifically *how* women are modifying their crack use practices to incorporate safer strategies. Women have a desire to be healthier in the context of crack use, and it is timely to investigate how they go about minimizing harms and what facilitates and/or hinders their efforts. The goal of this study was to gain an understanding of the process of safer crack use amongst women residing in the DTES. By safer use, I refer to the actions taken to reduce the physical, psychological, emotional and interpersonal harms associated with smoking crack. The information gleaned from this study

sheds light on what women are doing to reduce harms as well as the current state of harm reduction resources for women who use crack cocaine in the DTES, particularly, what participants have found to be undesirable, and what aspects have been beneficial. The findings from the study can inform health care professionals in their work with women in the DTES as well as program developers and policy makers involved with harm reduction planning and implementation for women in the DTES who use crack. My study explored the research question: What is the process in which women engage to practice safer crack use? (by safer use, I refer to the actions taken that reduce the potential physical, psychological and interpersonal harms associated with crack use described earlier) The primary research objectives were:

- (1) Describe how women are practicing safer crack use and
- (2) Identify and describe the personal, social, economic, interpersonal, and political factors that influence the process of safer crack use engaged in by women.

Thesis Overview

This chapter has identified the need for the study by presenting the research question and objectives and highlighted the current dearth of inquiry into women's safer crack use practices. In chapter two, I provide an overview of the current literature pertaining to the research question. I approach this review incrementally, beginning with the harms associated with crack, then moving to gender and crack cocaine use, and finishing with safer crack use. Under the heading of safer crack use I include literature pertaining to harm reduction programming in addition to studies that have explored the various factors that impact safer crack use. In chapter three I cover the theoretical foundations for the study as well as articulate the methods employed. I explain how a women's-centred approach in addition to a harm reduction philosophy provided the lens by which the research was conceptualized. The use of grounded theory as the research approach

is articulated in addition to the methods used to collect and analyze the data. The ethical considerations that were applied in this research are described as is scientific quality. In chapter four, I present the findings. First, I situate the participants by providing background information regarding ethnicity, age, living circumstances, as well as how patterns of crack use have changed over time. At this stage I introduce a preliminary theory of safer crack use, illustrating through identified thematic processes how women engage in safer crack use practices. In chapter five, the findings are discussed with regard to the major discoveries, and how the insights compare and contrast with the current literature on women's crack use. The major contributions of this study are emphasized and the implications for bettering women's health in the context of crack use are presented. The chapter concludes with the limitations of the study as well as recommendations for further research.

CHAPTER TWO: REVIEW OF THE LITERATURE

Introduction

To develop a comprehensive understanding of the current state of research pertaining to how women engage in safer crack use practices, I conducted a systematic search of the literature using the databases CINAHL, PsycINFO, Web of Science and PubMED. Due to the specific nature of the research topic along with knowledge that inquiry in this area is limited, the search method entailed assessing varying dimensions of my research focus in that the search progressed in an incremental fashion beginning with the harms associated with crack use, then moving to the topic of gender and crack use, and focusing finally on safer crack use. The heading of safer crack use encompassed literature pertaining to harm reduction programming as well as the factors that influence safer crack use. Conducting the search in this manner allowed me to develop a comprehensive understanding of the various facets explored in this topic area. An understanding of the state of inquiry within these particular areas was essential to informing the complex and specific research topic.

The Harms of Crack Cocaine Use

The first step to reviewing the literature with regards to women's safer crack use practices was to develop a comprehensive understanding as to the harms associated with crack cocaine use. Research in recent years has focused on crack use within urban centres as use of the substance is prevalent in impoverished regions where issues such as violence and criminal activity are commonplace (Bungay, Johnson, Varcoe & Boyd, 2010; Butters & Erickson, 2003; Fischer, Powis, Cruz, Rudzinski, & Rehm, 2008; Lejuez, Bornovalova, Reynolds & Daughters, 2007; Malchy, Bungay & Johnson, 2008; Shannon, Ishida, Morgan, Bear, Oleson, Kerr & Tyndall, 2006). Crack cocaine has been associated with a plethora of health problems including

finger, lip and mouth burns, cardiac and respiratory illness, HCV, HIV, and STI, mental health issues including anxiety and depression, as well as injuries resulting from violence (Bungay et al 2010; Butters & Erickson; Leonard, DeRubeis & Birkett, 2006; Falk, Wang, Siegal & Carlson, 2003; Fischer et al, 2008; Malchy et al, 2008).

Early Canadian research conducted in 1994 by Erickson, Adlaf, Smart & Murray (1994) employed a questionnaire that included questions about crack use despite focusing on people's experiences with powdered cocaine. The sample was comprised of 111 individuals of whom 53% were men, predominantly Caucasian. The findings were presented in the general context of cocaine and thus were not specific to crack use. The health concerns expressed by participants included difficulty relaxing, chronic insomnia, weight loss, as well as physical and mental exhaustion. Participants also identified a number of "adverse effects" associated with crack use including nausea, sweating, painful breathing, and increased heart rate.

More recent research has targeted investigating additional harms of crack use such as infections and burns. For example, the work of Fischer, Powis, Cruz, Rudzinski & Rehm demonstrated crack smoking as a modality for HCV transmission via the sharing of pipes with individuals who are HCV positive and possess oral sores. The study entailed testing the crack use paraphernalia of 51 participants within 60 minutes of smoking crack. The researchers checked for HCV RNA presence on the paraphernalia and photographed the oral cavities of participants to assess the possibility of mouth sores as a risk factor in HCV transmission. Results indicated that one (2%) of the 51 pipes tested positive for HCV virus, and the owner of the pipe was HCV positive and possessed oral sores. These results indicated the possibility of transmission of HCV via crack paraphernalia and warrant further investigation. Furthermore, Malchy and colleagues (2008) identified additional health harms by distributing a questionnaire to 97 street-involved

persons residing in the DTES who use crack cocaine. The sample included approximately equal male and female participation with 46% of participants identified as Caucasian and 32% identified as Aboriginal. The findings illustrated that the majority of participants experienced harmful physical consequences of crack use, and 52% were at risk of contracting health conditions as a result of use including infections, breathing difficulties, STI's, skin conditions and diseases such as various cancers and tuberculosis (Malchy, Bungay & Johnson, 2008).

Additional work in the DTES by Shannon, Ishida, Morgan, Bear, Oleson, Kerr & Tyndall (2006) investigated the feasibility of an inhalation site for individuals who use crack cocaine. The sample involved 437 participants of whom 67% were male, and 45% were Aboriginal. Participants were documented to have high rates of HCV (69%) as well as HIV (27%) and burns (40%). Another Canadian study carried out in Ontario that focused on injection drug use but involved participants who were also using crack highlighted a number of physical health issues related to crack use similar to those highlighted above including mouth burns, HCV and HIV (Leonard, DeRubeis & Birkett, 2006). The participants (n=112) were predominantly male (77%) and results indicated that 51.8% of participants had mouth burns or cuts, 62.5% were positive for HCV and 12% were HIV positive.

Research has also investigated the harms of crack use specific to women. The relationship between women's health, crack cocaine use, and access to health services, as well as the link between crack use and poor health outcomes has been well documented (Butters & Erickson, 2003; Erickson, Butters, McGillicuddy & Hallgren, 2000; Leonard, DeRubeis, Pelude, Medd, Birkett & Seto, 2007; Malchy, Bungay & Johnson, 2008). Butters & Erickson conducted face-to-face interviews that examined the health concerns of women living in poverty who were regular users of crack cocaine. The sample (n=30) consisted of a variety of ethnicities: 17 White,

7 Aboriginal, 5 Black and 1 East Indian. The most common health concerns expressed by participants included: respiratory conditions such as asthma and pneumonia, diseases such as HCV and HIV/AIDS, and mental health concerns such as depression, anxiety and suicidal tendencies. Furthermore, additional issues were STI's and the prevalence of violence with 13 women having been physically assaulted, and six women having been sexually assaulted or raped. Sexual assault and rape were perpetrated by dealers, customers, and in some cases, boyfriends. Despite the numerous health issues identified, women expressed reluctance to access health services due to the judgement and stigmatization they felt from health care professionals.

Quantitative research conducted in Miami, Florida also found crack to be an inhibitory factor to women accessing health services such as community clinics and emergency rooms (Metsch, McCoy, McCoy, Miles, Edlin, & Pereyra, 1999). The sample involved 624 participants, equal numbers of men and women, from impoverished inner city Miami neighbourhoods.

Participants were divided into approximately equal groups of persons who used crack and those who did not. Ethnicities included African American, Caucasian, Hispanic and "other", with the majority being African American. The findings indicated that women who smoked crack were half as likely to access medical services when compared to women who do not smoke crack, whereas crack use did not appear to affect men's overall use of health services. Hypotheses for the observed findings included the "street addict lifestyle" defined as prioritizing "drug seeking over health", as well as contextual factors including location of the clinics, lack of transportation to the clinics, and experiencing stigmatization by health care providers.

The Safer Crack Use, Outreach, Research and Education (SCORE) project (2007) also highlighted health harms unique to women in the context of crack use. The study was conducted in the DTES with the goal of better understanding and attending to the harms of crack by

distributing safer crack use kits. Although the study was not entirely specific to women, components of the project were, such as kit-making circles in which women in the DTES that use crack constructed the kits. The project highlighted the unique disadvantages women experience due to the gendered use of crack cocaine including: women often do not have their own equipment, (and therefore share equipment) and are frequently second to use a pipe, both scenarios which facilitate exposure to infection. Furthermore, many women were involved in street-level sex work, and are thus exposed to additional violence and social stigma as well as the expectation to supply men with crack.

Gender and Crack Cocaine Use

Because my research sought a gender-based analysis, it was imperative to assess the research into crack cocaine use from a gendered perspective, including exploration into the various factors that potentially contribute to women's use of the substance. By employing a gender lens, I provided the contextual basis for the study in relation to a gender analysis. By gaining an understanding of factors that potentially play a role in women's use of crack, the necessary elements for supporting women's safer use practices may be realized. The literature in this area included varying approaches to the issue including the relationship between gender and crack cocaine, exploration into the health care needs of women who use crack cocaine, and the experiences of women who use crack and are involved in sex work.

Research into women's use of crack cocaine has principally focused on individual factors that reportedly predispose females to crack use such as impulsivity, negative trait emotionality and childhood abuse (Lejuez, Bornovalova, Reynolds, & Daughters, 2007). Impulsivity is defined as the propensity to use crack with limited regard for any potential physical and/or interpersonal consequences, and this behaviour is linked to vulnerability, frequency and severity,

(including social and emotional consequences) as well as dependence (Lejuez et al. 2007). The authors define negative trait emotionality as a tendency toward mood disturbance (specifically, the propensity to experience adverse affective states), along with a poor reaction to stress, alienation and aggression (Lejuez). A study conducted by Lejuez et al explored gender differences in the context of crack use by having participants (n=171) 37% female, and 92.8% African American complete questionnaires pertaining to crack use. All participants were currently enrolled in a drug treatment program in the Washington, D.C. area, and had gone through a detoxification process prior to taking part in the study. The questionnaires were comprised of several sections including: demographics, the Multidimensional Personality Questionnaire-Brief Form (MPQ) to measure trait affect, the Barrett Impulsiveness Scale, The Childhood Trauma Questionnaire-Short Form, drug use (measured by dependence diagnosis, current use, and lifetime heaviest use) and the Drug Use Diagnostic Identification Test. Results indicated that women reported significantly higher rates of lifetime heaviest use, higher negative trait emotionality, more childhood trauma, and higher trait impulsivity when compared to men. However, biases are evident in that the sample did not consist of equal numbers of men and women, participants were in treatment when data were collected, and the authors highlight the potential bias in the retrospective nature of the measures.

Another study investigated the gender difference in stress reactivity among women and men who use cocaine (Back, Brady, Jackson, Salstrom & Zinzow, 2005). Stress reactivity was defined as the psychological (feelings of anxiety) and physiological (heart rate) manifestations of stress. The sample (n=39) consisted of 21 women and 18 men, 72.2% Caucasian, 27.8% African American, that were cocaine dependent. Cocaine dependence was determined via structured clinical interview for the DSM-IV-TR Axis I diagnosis. Participants had to have abstained from

cocaine use for three days prior taking part in the study. Stress reactivity was measured subjectively by questionnaire assessing current mood, cravings for cocaine, and desire to use cocaine and physiologically by heart rate and skin conductance. These factors were measured in the context of two "stressful" tasks, one psychological (the Mental Arithmetic Task) and physiological (the Cold Pressor Task, in which subjects were asked to submerge one hand in ice cold water). Both tasks were reported as having been widely used to study stress reactivity. Results indicated that women experienced a significantly more intense stress response to both tests as compared to men. The authors hypothesized that females may be more susceptible to experiencing increases in subjective stress and therefore may be more likely to use crack in response to negative emotions or situations (Back et al 2005).

Additional studies have also examined the factors involved in women's use of crack. A study conducted Erickson, Butters, McGillicuddy & Hallgren (2000) involved in-depth interviews with 30 women who were using crack and involved in the sex industry. The study took place in Toronto, Canada and the majority of participants were white (17), followed by Aboriginal (7), Black (5) and East Indian (1). Findings highlighted that traumatic events such as death of a loved one, divorce, or an abusive relationship were noted to precipitate crack use. Although assessing individual factors is important and contributed to knowledge development, a trend across the studies highlighted the need to build on the findings with an emphasis on the greater contextual factors which contribute to drug use in females including poverty, unstable housing and availability of resources (Bungay, Johnson, Varcoe & Boyd, 2010: Lejuez, Bornovalova, Reynolds, & Daughters, 2007; Metsch, McCoy, McCoy, Miles, Edlin & Pereyra, 1999).

A mixed methods study conducted by Bungay, Johnson, Varcoe and Boyd (2010) served to emphasize the influence of larger structural and interpersonal contexts (eg. macro vs. individual factors) that contribute to women's crack cocaine use. The study employed participant observation as well as questionnaires pertaining to crack use completed by 126 women of whom 58 were Aboriginal-Canadian, 43 were Euro-Canadian and 23 were Other Canadian. Results showcased the importance of considering the influence of numerous factors in crack cocaine use amongst women living in marginalized circumstances including: unstable housing, unemployment, poverty, violence, involvement in the criminal justice system, racism and sexism. Participant observation provided the means to identify a number of themes present in the lives of the women whom took part, including crack use as a modality to manage a number of health issues ranging from dental pain (lack of structural and financial access to dental services), soft tissue injuries (exposure to everyday violence) and mental health disturbances (lack of mental health services). The study emphasized the importance of shifting from an individual and behavioural focus in health care and social services to examining the larger socio-political factors and structural inequities that influence women's health.

For women, the health issues extend beyond the physical effects of crack use and present unique disadvantages due to the gendered use of crack cocaine (SCORE Project, 2007). As described earlier, findings from the SCORE Project illustrated that women often do not have their own equipment, (and therefore share equipment) and are frequently second to use a pipe, both scenarios which facilitate exposure to infection (SCORE Project). Furthermore, many females who use crack cocaine within impoverished neighbourhoods are involved in the sex industry, and are thus exposed to additional violence and social stigma as well as the expectation to supply men with crack (SCORE Project).

With growing evidence that women face unique harms in the context of crack use, exploration into how women engage in safer crack use is imperative.

Women's Safer Crack Use Practices

Harm Reduction Programming for Safer Crack Use.

At present there is little research pertaining to women's safer crack use practices, and much of what is known is situated amidst harm reduction programming for crack use (Bungay, Johnson, Boyd, Buxton, Malchy & Loudfoot, 2009; Bungay, Johnson, Varcoe & Boyd; Dawe, Gerada & Strange, 2002; SCORE Project, 2007). In a Canadian study, Boyd, Johnson and Moffat (2008) examined the perceptions regarding the Safer Crack Use, Outreach, Research and Education (SCORE) project, with the goal of gaining an understanding of the perceptions around safer crack kits. The study conducted 27 interviews with men and women who use crack (17 women, 1 transgendered person, and 9 men). The findings showcased facilitating factors of the safer crack kits as: availability of equipment, ease of using the equipment, repeated demonstrations and peer-to-peer involvement. Barriers were identified as: persons who had used for many years and were disinterested in changing practices and persons who had had a bad experience with the new equipment and thus disengaged from the initiative. The study emphasized that participants acknowledged the need for harm reduction materials along with an expressed willingness to participate in future safe crack smoking initiatives. This was a major finding, drawing attention to the fact that women who use crack demonstrated both an interest and a need for harm reduction services around safer crack use, and for these initiatives to be incorporated into mainstream healthcare planning. Further investigation into women's harm reduction practices and needs in the context of crack use is thus indicated.

A study conducted by Bungay, Johnson, Boyd, Malchy, Buxton and Loudfoot (2009) utilized data (field notes) taken during women's crack kit-making sessions (n=200) that were a component of the SCORE (2007) project. Kit-making sessions occurred 12 times a month over one year, were approximately one hour in duration, and included four women from the DTES, two members of the research team, and one peer facilitator. The sample included women from the DTES ranging in age from 20 to 60, and represented diverse social, cultural and ethnic backgrounds. Most lived in extreme poverty and were currently using or had previously used illegal drugs. The research explored the value of the sessions as a women's-centred harm reduction initiative, emphasizing that the kit-making sessions provided women with support experienced in three major ways: creating a safe space, sharing information about crack use harms, safer use practices, harm reduction programming, as well as building community. Findings from the original SCORE project emphasized that the kit-making sessions highlighted the integral role of women supporting women in safer crack use. The kit-making sessions were emphasized as forums where fresh ideas and emotional support were shared amongst women. These findings provide valuable insight into supportive factors in women's safer crack use, necessitating further investigation.

Women's Safer Crack During Pregnancy.

Outside the context of harm reduction programming, the knowledge regarding women's safer crack use practices is largely specific to pregnant women (Flavin, 2002; Kearney, Murphy, Irwin & Rosenbaum, 1995; Murphy & Rosenbaum, 1999). The work of Kearney, Murphy, Irwin & Rosenbaum involved a sample of 60 women who reported using crack at least once a week during pregnancy. Participants were of varying ethnic groups with the majority having been African American (83%) with other ethnicities including Caucasian (10%), Latina (5%), and

Pacific Islander (2%). Women in the study demonstrated a dedication to fetal health by incorporating a number of harm reduction strategies of which decreasing crack use was the most prevalent. Women reduced use by avoiding others who used crack, avoided locations where crack was sold, and applied willpower in situations where crack was present. Other strategies included taking vitamins and using herbal preparations to clean the system and reduce the effects of crack on the developing fetus. Another key finding here demonstrated that women were often reluctant to access health services to avoid scornful interactions and stigma and thus would sometimes opt to care for the fetus themselves in the absence of services.

Furthermore, the work of Flavin (2002) involved a secondary analysis of qualitative and quantitative data pertaining to pregnant women's harm reduction strategies with regards to cocaine use. The qualitative data presented similar themes as the above study, highlighting the concern pregnant women felt with regards to crack use harming the developing fetus. Consequently, women adopted a number of harm reduction strategies including ceasing crack use while pregnant, adhering to a schedule of days of no crack use, substituting crack for substances viewed as less harmful (including cigarettes and/or marijuana) and making a concerted effort to eat more. The quantitative data were obtained from the 1992 National Institute on Drug Abuse (NIDA) Washington, DC Metropolitan Area Drug Study (DC*MADS) to evaluate the type and extent of harm reduction strategies adopted by pregnant women. Comparisons of quantitative data of pregnant women who use crack with pregnant women who do not use crack were made. These data actually focused more health care coverage and income as opposed to harm reduction strategies. Findings with regards to harm reduction strategies illustrated that women who used crack perceived it to be very harmful to the fetus, and viewed alcohol and marijuana as less harmful. Women who used crack were also found to access

prenatal care later than women who did not use crack. The findings illustrated important harm reduction strategies incorporated by women to reduce the harms of crack while pregnant, but the focus here is on fetal health as opposed to women's health. Thus, knowledge pertaining to harm reduction in the general context of women's health remains largely unknown.

Factors Influencing Women's Safer Crack Use Practices

Environment.

The impact of contextual factors on safer drug use practices has been explored, but most of these studies pertain to injection drug use and are not specific to women. For example, the work of Rhodes, Singer, Bourgois, Friedman, and Strathdee (2005) carried out a review of recently published literature to examine the social structural production of HIV risk associated with injection drug use. The authors propose that the "risk environment" (defined as the space, whether social or physical, where a variety of exogenous factors interact to increase vulnerability to HIV in the context of injection drug use) serves to increase the risk of HIV transmission with injection drug use. These factors include poverty, the role of peer groups and social networks, inequities in relation to gender, ethnicity and sexuality, social stigma, policies, laws and policing. (Rhodes et al). Quantitative research by Maas, Fairbairn, Kerr, Li, Montaner & Wood (2007) examined the DTES as an environmental risk factor amongst a cohort of individuals who use injection drugs. Subjects were recruited (n=1035) from the Vancouver Injection Drug Users Society (VIDUS), an open prospective cohort of individuals who use injection drugs and the sample included approximately equal numbers of women and men. Initially, baseline characteristics were stratified by DTES residents vs. non-DTES residents to determine possible differences. Variables considered included gender, age (>24<), ethnicity (Aboriginal or other), daily injection of heroin, daily injection of cocaine, and involvement in the sex industry. The

findings illustrated that DTES residents were more likely to be Aboriginal, living in unstable housing, use cocaine daily and be involved in the sex industry. Residing in the DTES was identified as an independent risk factor for HIV infection. The authors attributed this to the stress and challenges of living in an impoverished urban environment which may lead to increased drug use and HIV risk behaviour as a strategy to manage the challenges.

Furthermore, Latkin, Williams, Wang & Curry (2005) explored the impact of neighbourhood social disorder (defined as vandalism, burglary, robbery and assault) on HIV transmission with individuals using injection drugs within impoverished neighbourhoods in Baltimore, MD. The sample (n=1637) was 66% male, 95% African American, and 51% had less than a grade 12 education. The study employed structural equation modeling to examine models of relationships among neighbourhood social disorder, depressive symptoms, injection frequency, and injection risk behaviour. The findings illustrated significant pathways between social disorder and depressive symptoms and depressive symptoms were directly associated with injection risk behaviour including sharing of needles, increased frequency of injection, and using needles that were not definitively clean. Furthermore, the work of Duff (2008) explored drug use in urban settings from a different angle by proposing the concept of the "enabling environment" by reviewing qualitative research projects conducted in Melbourne, Australia and Vancouver, Canada. The work draws attention to how urban environments support the development and maintenance of relational networks of "social repair" crucial to health and well-being and makes reference to this in the context of substance use and harm reduction efforts.

Another aspect of the environment that has been the focus of research with regards to drug use practices is policing. The influence of policing was highlighted in the mixed-methods study by Bungay, Johnson, Varcoe & Boyd (2010) noted earlier in this thesis. The questionnaire

results identified police actions such as arrest and seizure of drug using equipment as contributors to women not carrying their own smoking equipment. Consequently, these women had a greater likelihood of sharing, which increased the risk for infections. Of the survey participants (n=126) 43.7% of women reported not carrying their own pipe or mouthpiece for fear of being "jacked up" (having equipment taken), 27% had their pipes smashed by police, and 18.3% stated that police made them smash their pipes. Another DTES study looked at the role of policing in as a barrier to syringe availability for women who use substances and were involved in street-level sex work (Shannon, Rusch, Shoveller, Alexson, Gibson & Tyndall (2007). The study used data from an initial pilot project that involved approximately 200 women in interview-administered questionnaires and social mapping sessions. A secondary analysis using logistic regression illustrated that health services and sites where clean syringes could be obtained were located in physical settings that were avoided due to violence and policing. The findings thus suggest that policing and violence serve as barriers to obtaining services and equipment necessary for safer injection drug use practices.

Violence.

Violence is another factor highlighted in the literature specifically with regards to women and crack use (Bungay, Johnson, Boyd, Buxton, Malchy & Loudfoot, 2009; Bungay, Johnson, Varcoe & Boyd, 2010; Butters & Erickson, 2003; Butters, McGillicuddy & Hallgren, 2000). The threat of violence was evidenced not only to create a sense of havoc and disarray in women's lives, but also contributed to unsafe smoking practices. In studies described earlier, women were noted to use crack quickly, thereby sharing equipment more readily, in an attempt to avoid overexposure to the streets (Bungay et al 2010, Butters & Erickson; Butters et al, 2000).

Additionally, violent encounters were not limited to outdoor areas, but also occurred in homes

and social settings (Bungay et al, Butters & Erickson, Erickson et al, Rehman, Gahagan, DiCenso & Dias, 2005; Shannon, Rusch, Shoveller, Alexson, Gibson & Tyndall, 2008). Furthermore, many women who use crack are also involved in street-level sex work which exposes women to additional risks for violence (Butters et al; SCORE Project, 2007). In the Bungay, Johnson, Varcoe and Boyd (2010) study mentioned earlier, violence was identified as one of a number of larger structural and interpersonal contexts (eg. macro vs. individual factors) that influence women's use of crack in the DTES. The factors in addition to violence included: unstable housing, unemployment, poverty, involvement in the criminal justice system, racism and sexism.

Availability of Equipment.

Another factor that has been explored in the literature with regards to safer crack use is the availability of equipment (City of Ottawa Safer Crack Use Initiative Evaluation Report, 2006; Leonard, DeRubeis, Pelude, Medd, Birkett & Seto, 2007; Ontario Needle Exchange Programs Best Practice Recommendations, 2006). This research remains somewhat limited, and has not been conducted with a specific focus on women. An Ottawa-based study designed to evaluate the impact of the Safer Crack Use Initiative (in which safer crack kits were made available at needle exchange programs in the city of Ottawa) examined the impact of equipment on drug use practices. The study employed data from the larger I-Track study, a cross-Canada surveillance study that examined the HIV and HCV risk-related behaviours among injection drug users (IDUs). The study involved personal interviews with a subset of 550 I-Track participants (out of a cumulative total of 634) at three separate intervals. Participants, in addition to using injection drugs, reported having smoked crack within 6 months of the interview. The greatest proportion of participants in each phase were male (68-82%) and the majority identified as

Canadian (76-86%). The findings illustrated that with the availability of harm reductions materials two major safer crack use patterns were observed. First, transitioning occurred, which is defined as changing the route of drug administration from intravenous to inhalation, and second, the sharing of equipment decreased. Both newly adapted practices consequently reduce the opportunity for exposure to infections (Leonard et al, 2007). Thus, the findings highlighted that with the availability of resources, individuals who use crack have the opportunity to take control of their own health, and consequently, the spread of infections such as HCV and HIV are reduced by implementing safer crack use practices (Leonard et al). These findings are also communicated in the City of Ottawa Safer Crack Use Initiative Evaluation Report (2006). Furthermore, the Ontario Needle Exchange Programs Best Practice Recommendations (2006) outline the importance of providing equipment for smoking crack at needle exchange programs to prevent the transmission of HIV, HCV and other blood-borne pathogens through the sharing of equipment. Despite the importance of these studies in illustrating the effectiveness of equipment availability in reducing the spread of infections with individuals who smoke crack, there is little known about how equipment availability specifically impacts women's safer crack smoking practices.

Summary

The studies reviewed provide invaluable insight into the research topic, but there are limitations to note. The first and most obvious is that the majority of research with regards to safer drug use practices has focused on injection drug use. Not to discount the importance of this research, but with evidence that crack use is on the rise, gaining an understanding as to how individuals practice safer crack use is of the essence to contribute to health promotion.

Furthermore, the fact that evidence suggests women are using crack at increasing rates when

compared to men, and that women face unique harms associated with crack, the dearth of research into women's safer crack use practices is problematic. The studies that have examined women's strategies to minimize the harms of crack have been situated within the realm of harm reduction programs and pregnancy. Thus, how women minimize the harms of crack in the context of general health remains largely unknown.

Furthermore, the research into the myriad of factors that impacts safer drug use has been dominated by studies pertaining to injection drug use. Thus, insight into the factors that impact safer crack use remains limited, especially with regards to women. The literature has demonstrated that crack use practices are gendered, and women living in poverty who use crack cocaine face formidable barriers to health on a daily basis. By understanding how women apply harm reduction strategies for crack cocaine will enable nurses to best support women with regards to health management and promotion. Considering the gaps evident in the literature, it is necessary to engage in research that seeks to understand how women engage in safer crack use practices as well as identify the factors that influence this process.

CHAPTER THREE: RESEARCH DESIGN AND APPROACH

Introduction

The research question for this study was: What is the process in which women engage to practice safer crack use? The objectives were to:

- (1) Describe how women are practicing safer crack use and
- (2) Identify and describe the personal, social, economic, interpersonal, and political factors that influence the process of safer crack use engaged in by women.

To address the research question and objectives of this study, it was necessary to employ a research method that allowed for an understanding of the process by which women residing in the DTES engaged in safer crack use practices. Therefore, I selected grounded theory as this approach seeks to construct abstract theoretical explanations of social processes (Charmaz, 2006), often addressing how humans work through problems by employing "how" questions to understand the ways in which a problem is managed (Corbin & Strauss, 1990). The end result, in the context of health care, is a theory that may be applied to a number of settings to facilitate the care provided (Polit & Beck, 2008). By gaining an understanding of the process of how women modified their crack using practices to limit harms, and what factors influenced them to do so, future programming initiatives may be developed more effectively through being informed by the women themselves.

In addition to grounded theory, I applied a women-centred approach as the theoretical lens to guide the research. Women-centred approaches to both research and health care share much common ground with harm reduction as both have philosophical concerns for social justice, human rights and active involvement of the individuals whose lives are influenced by the research and health services aimed at improving their health (Bungay, Johnson, Boyd, Buxton,

Malchy & Loudfoot, 2009). Based on the fact that, as outlined in this thesis, much of the research concerned with women's health, harm reduction and safer crack cocaine use has called for attention to be paid to socio-political factors and structural inequities that influence women's health, a women-centred approach will facilitate conducting the research with this focus.

Methodology

Grounded Theory.

Grounded theory was developed in the 1960's by two sociologists, Barney Glaser and Anselm Strauss. The development of this research approach countered the ruling methodological assumptions of mid-century research specifically in that it proposed systematic qualitative analysis had its own logic and could generate theory (Charmaz, 2006). In particular, Glaser and Strauss proposed to construct abstract theoretical explanation of social processes (Charmaz). One of the major underlying assumptions to this methodology maintains that the concept of process is fundamental to human existence, and humans subsequently create structure by engaging in processes (Glaser, 1992). Because the focus of my research was to develop an understanding of the process by which women engaged in safer crack use practices, this method, which maintains the concept of process as crucial to human existence, is appropriate to address the research question. Grounded theory has been used to explore similar research topics such as the strategies women employed to manage mothering while using crack cocaine (Kearney, Murphy & Rosenbaum, 1994; Kearney, Murphy, Irwin & Rosenbaum). In the case of this study, grounded theory was used to facilitate an understanding of the process involved in safer use of crack cocaine, and how this process unfolded over time.

The development of grounded theory represents the combination of two contrasting traditions by virtue of its two creators: Glaser's Columbia school positivism and Strauss's

Chicago school pragmatism and field research (Charmaz, 2006). Glaser asserted that grounded theory provided a means to move qualitative inquiry beyond descriptive studies and into the realm of theoretical frameworks (Charmaz) and added that a completed grounded theory required a close fit with the data, usefulness, conceptual density, durability over time, modifiability and explanatory power (Glaser, 1992). Meanwhile, Strauss brought a pragmatist philosophical tradition to the development of grounded theory, with the contribution of symbolic interactionism (Charmaz). Symbolic interactionism is a theoretical perspective that assumes society, reality and the self are constructed via human interaction and are incumbent upon language and communication (Charmaz). According to this perspective interactions are dynamic, interpretive, and people have the capacity to think about their actions rather than merely responding to stimuli (Charmaz). Symbolic interactionism consequently provides a means to address how people create, enact and change meanings and actions (Charmaz). Further assumptions inherent to grounded theory are informed by symbolic interactionism, and include the belief that persons are actors who respond to situations and act on the basis of meaning (Charmaz).

Overall, there are a number of defining components of grounded theory practice which include: simultaneous involvement in data collection and analysis, constructing analytic codes and categories from the data and not from preconceived notions, using constant comparisons during each stage of analysis, and sampling aimed toward theory construction, not for population representativeness (Charmaz). The goal is, by applying these principles, for the data collected to reveal the perspectives of the subjects in the area under study (Corbin & Strauss, 1998). The methodology necessitates an iterative process by which data collection and analysis occur

simultaneously to ensure that the emergent theory remains close to the data and as a result, theory derived from the data is more likely to resemble reality (Corbin & Strauss).

Using grounded theory has been noted as particularly valuable for nursing research in that the end result of theory generation can be applied to a variety of settings to improve the quality of care provided (Beck, 1996). This study sought to shed light on how women engaged in safer use practices such that their strategies and approaches may be supported to better health outcomes. By using grounded theory, it was possible to examine how the process of safer use unfolded and what factors influenced this process. Thereupon, the central focus became interpretation of patterns of action which ultimately provided an abstract, interpretive understanding of the data collected from participants (Corbin & Strauss). This was an appropriate choice as the methodology supported me in constructing abstract theoretical explanations of the social processes women engage in when practicing safer crack use.

Harm Reduction Theoretical Perspectives.

As harm reduction is a component of safer crack use, it is essential to provide an overview of both the concept of harm reduction as a theoretical lens as well as clarification into what I mean by harm reduction programming. Although the concept of harm reduction remains a developing perspective (Erickson, Riley, Cheung & O'Hare, 1997), for the purposes of my project I have utilized Tatarsky's (1998) definition of harm reduction which is "a pragmatic approach that accepts active substance use as a fact and assumes that substance users must be engaged where they are, not where the provider thinks they should be. It recognizes that substance use and its consequences vary along a continuum of harmful effects for the user and the community, and that behaviour generally changes by small incremental steps" (p.10). This particular definition was well-suited to situate the study as it stated the philosophical and

practical tenets of harm reduction. Abstinence is not the primary goal of the harm reduction model; rather, it is one of many varied alternatives to reduce harm with the role of the individual an active one, taking responsibility for choices about his/her own life through education, knowledge, and informed decision-making (Erickson et al, 1997). Drug use is viewed as dynamic and includes a range of expression including casual, dependent, functional, controlled and dependent use (Alexander, 2006). Moreover, problematic use is recognized as stemming from social factors and individual trauma (Alexander).

The harm reduction philosophy, as outlined above, was developed largely out of the deficiencies of existing approaches to illicit drug use, specifically the prohibitionist approach which frames drug users as criminals, and consequently subjects them to legal sanctions (Marlatt, 1996). The philosophical roots of harm reduction are in pragmatism and humanism, thereby providing a practical alternative to the criminalization of individuals who use substances by shifting the focus away from the drug use itself to the consequences or effects of the use (Marlatt). Such effects are evaluated on the basis of whether they are helpful or harmful to the individual who is using, as well as to the larger society, and not on the basis of whether the behaviour itself is morally right or wrong (Marlatt).

A Women-Centred Approach to Research.

The theoretical lens that guided this research was a women-centred approach. A women's-centred approach was appropriate to guide the study as it necessitated that the social, economic and political inequities unique to women are realized as well as insisting an awareness of the unjust power relations that serve to construct these inequities (Barnett, 2000). A women's-centred approach resonates with the harm reduction philosophy in that both embrace concerns for social justice and human rights (Barnett) as well as accentuate client empowerment, self-

determination/choice and the necessity of clients setting their own goals (Brown, Stewart & Larsen, 2005). A women's centred approach requires that inquiry consider the unjust power relations that create inequities (Barnett) and consequently, the establishment of safe spaces where women's voices may be heard will be cornerstone to this research study (Whynot, Greaves, Miller, Mactier, Berry, Poole & Schdev, 2006).

Sample

Grounded theory utilizes non-probability sampling, with the selection of interviewees ceasing when no new information emerges with regards to the concept(s) explored (Cutcliffe, 2000). Consequently, sampling in grounded theory is often termed theoretical rather than purposeful as it is driven by the emerging theory (Strauss & Corbin, 1998). However, other authors of qualitative research, such as Patton (1990) argue that all types of sampling in qualitative research can be termed purposive. For this study, I employed purposive sampling in that, as outlined by Polit and Beck (2008) this sampling approach entails carefully selecting participants based on specific inclusion criterion to best enhance my understanding of the phenomenon. Inclusion criteria for the participants included: (a) female (b) English speaking (c) over the age of 18 (d) currently living in, or actively involved with, the DTES (e) currently smoke crack cocaine (defined as having smoked crack cocaine with within the last 30 days).

Purposive sampling entailed recruitment at the organization Vancouver Area Network of Drug Users (VANDU). VANDU is a user-run facility that runs several groups including a women's support group that meets weekly to discuss many issues including crack use. I negotiated entry to VANDU via several steps. I first contacted the Executive Director by telephone, identified who I was, and briefly described the research I wished to conduct at the VANDU site. I was asked to send her an email outlining my research proposal, and was invited

to present the proposal at the weekly Board meeting. I arranged a time to present my proposal to the Board, and was informed that the Board would make an executive decision with regards to the proposal, and I would be informed by the Executive Director of the decision. Once I was informed that the proposal was approved, the Executive Director connected me with a peer recruiter to aid with purposive sampling, as this peer was involved with running the women's support group. The peer recruiter was provided an information sheet outlining the goals of this research and the details as to what involvement in the study would entail. That way, she was able to inform women at the group about the research and had the information sheet to provide additional details to women who were interested in taking part.

Setting

The DTES is one of Canada's most economically disadvantaged neighbourhoods and it is estimated that approximately 16,000 people live in the area, with women comprising 38% of the population (City of Vancouver, 2004). The area is home to major social issues including poverty, drug use, crime, survival sex work, high HIV/HCV infection rates, violence, mental illness and unemployment (CHASE project team, 2007). Thus, women who live in the DTES reside in a environment filled with constant challenges. The threat of violence on an everyday basis is a reality particularly because women are frequently in public spaces, making it difficult to avoid potentially violent interactions with men, or exploitation by others in the neighbourhood (Bungay, 2008). Violence has also been found to pervade not only the streets and public areas, but also homes and social settings (Bungay, Bungay, Johnson, Boyd, Malchy, Buxton & Loudfoot, 2009; Bungay, Johnson, Varcoe & Boyd, 2010; Shannon, Rusch, Shoveller, Alexson, Gibson & Tyndall, 2008). The paucity of job opportunities leads many women in the area into sex work, which introduces additional threats of violence (Bungay). Unstable housing and

poverty force many women to sleep in the streets, and face constant hunger (Bungay). Crack use in the neighbourhood is prevalent, and has been increasing over the past 10 years (Boyd, Johnson & Moffat, 2008). As a result, participants were drawn from the DTES to shed light on the process by which women engage in safer crack use.

Data Collection

Group interviews were used for this project as part of negotiating with the women's group at VANDU as to how data would be collected. It was decided that group interviews would be the most effective means to obtain the voices and opinions of women. Allowing for group discussion has been demonstrated as very supportive for women to discuss harm reduction strategies, drug use and their overall health (Bungay, Johnson, Boyd, Malchy, Buxton & Loudfoot 2009). I used this approach, with a focus on establishing a safe environment where women could come and feel free from, as articulated by Bungay et al (2009), violence as well as discriminatory attitudes of service providers. I employed group interviews as opposed to focus groups, because the goal was to give women an opportunity to bring their voices forward and share their unique experiences. Focus groups, alternatively, use research to uncover or create shared perspective or consensus around particular topics, rather than paying attention to individual differences (Thorne, 2008). I welcomed the women into the meeting room at VANDU, with chairs placed around a table to facilitate discussion, and explained the goals of the project. I provided each woman with an information sheet and obtained verbal consent. I emphasized that the group session was an opportunity for women to share their individual experiences around limiting the harms associated with crack cocaine use.

The use of group interviews was ideal to ensure each woman's story was heard. This was essential for the purposes of this research in keeping track of individual processes of "safer"

crack use. Furthermore, this approach to data collection provided the opportunity for the women to, after each story was shared, comment and discuss the similarities and differences amongst experiences (Bungay, Johnson, Boyd, Malchy, Buxton & Loudfoot, 2009). Women's comparing and contrasting of stories provided insight into the varying time periods of involvement with crack and how length of involvement, along with age, potentially affected safer crack use practices. Furthermore, group interviews are more consistent with a women's centred approach as opposed to individual interviews as participants feel safer in small groups rather than one-on-one with the researcher (Bungay et al, 2009). Lastly, group interviews are ideal in this situation as a greater amount of data can be collected in a shorter period of time (Bungay et al).

The seven group interviews consisted of four women (with the exception of one group of three, and one group of five) and ran for approximately 40 minutes to one hour. The groups were guided by a number of open-ended questions designed to stimulate conversation amongst the women (Appendix C). Open ended questions were appropriate for this study as the goal was to gain insight into the process by which women modified their crack using practices to reduce some of the harms associated with use. By employing open-ended questions, it was possible to obtain thick, descriptive data with regards to experiences (Charmaz, 2006). I developed the questions by drawing on my own work experiences as an outreach nurse in community mental health in the DTES as well as previous interview guides used with this population by others (Bungay, 2008). The questions pertained to women's use of crack cocaine, and how these practices have changed over time with a particular focus on how harms were minimized.

After completion of the groups, I listened to the audio to check for discrepancies as well as to note prevalent themes and concepts to explore in subsequent groups, an approach consistent with grounded theory (Charmaz, 2006). Participants were asked prior each session if they would

be open to the possibility of a follow-up interview for additional exploration into key topics. I ran six focus groups using the above stated questions, and then conducted a seventh group in which I asked specific questions around themes that began to emerge from the initial six groups. The seventh group gave me the opportunity to clarify and generate additional information with regards to pertinent issues that arose in the first six sessions and is in accordance with data collection in grounded theory i.e., iterative and concurrent with analysis (Charmaz). All group interviews took place at VANDU, with times arranged by myself and the staff present at the facility. The focus groups were tape recorded and transcribed verbatim by an experienced transcriptionist. Safety during the groups was of utmost importance. To ensure participants felt safe during the sessions, groups were run in one of the meeting rooms at the VANDU site. Staff member at VANDU were aware of dates and times, and a sign was placed on the door to ensure no interruptions.

Data Analysis

Data analysis was carried out using grounded theory methods namely open, focused axial, and theoretical coding (Charmaz, 2006; Corbin & Strauss, 1998; Glaser, 1992) described in more detail below. Data analysis in grounded theory entails constructing analytical codes and categories from the data and not from preconceived logically deduced hypotheses, thereby providing the pivotal link between data collection and the emergent theory (Charmaz). After each group I maintained a journal of my thoughts and impressions to keep track of my potential biases. Coding commenced with open coding, in which segments of data were categorized with a short name that simultaneously summarized and accounted for each piece of data; consequently, the codes illustrated how I selected, separated and sorted data to begin an analytical account of them (Charmaz). By analyzing in this manner and coding pertinent lines, the actions and

consequences (alternatively stated as processes) could be identified (Charmaz). I moved through the data quickly and spontaneously to fuel thinking and promote novel conceptions of the information at hand, with the goal of capturing condensed representations of the information while ensuring that the active nature of the data was preserved (Charmaz). Charmaz described this concept as Glaser's "coding with gerunds" which entails preserving the actions of the participants, that in turn facilitates the researcher's analysis from the participant's viewpoint. By maintaining the angle of the participants, the researcher stays close to the data, a major tenet of open coding, (Charmaz).

The next stage is termed focus coding, and in this stage I used the most significant and/or frequent earlier codes as a means to move through large amounts of data (Charmaz, 2006). This process required decisions around which particular initial codes made the most analytic sense to categorize the data comprehensively and concisely (Charmaz). The constant comparative method, which compares open codes to identify similarities and differences, was applied at this stage of the analysis (Glaser, 1992). At this time small notes called "memos" were used to document thoughts and ideas about possible connections between open codes, their meanings, and what the participants were expressing through the codes (Charmaz). Memo writing is an integral part of grounded theory and provided me with a system to keep track of all hypotheses and general questions that arose during the analytic process (Charmaz). As I made my way through the data I kept a sheet of emerging themes and questions that I built on as I moved through subsequent data sets. I began to connect the themes and ask more questions as the analysis process progressed. The theoretical underpinnings of the study guided memo writing with potential questions such as: "is this really safer practice?", "where did women learn about this practice?" and "how does violence impact safer use?" Memos provided an organized trail of thought processes and were the key to linking categories, identifying the core category, and fundamental in the development of the preliminary theory of safer use that is described in the findings (Charmaz).

The next stage, axial coding, related the categories to subcategories with a specific focus on the properties and dimensions of a category (Charmaz, 2006). This process essentially reassembles the data that were broken down in the open coding phase, created coherence in the emerging analysis, (Charmaz) and provided the means to "weave the story back together" (Glaser, 1992). Axial coding served to answer such questions as "when, where, why, who, how, and with what consequences?" (Charmaz). By applying these questions, I was able to describe women's safer use practices and related influential factors more fully (Charmaz). The analysis culminated in theoretical coding, which involves conceptualizing how the codes may relate to each other as hypotheses to be integrated into a theory (Charmaz). Theoretical codes specify possible relationships between categories that were developed at the focused coding stage, and allowed for the telling of a coherent, analytic story (Charmaz).

Ethical Considerations

A number of ethical considerations were addressed in the design and implementation of this research study including: informed consent, confidentiality, data storage, financial honorariums and the maintenance of respectful relationships. I therefore employed the guidelines and protocols for behavioural research ethics outlined by the University of British Columbia, and completed the Tri-Council Ethics Tutorial (www.pre.ethics.gc.ca/english/tutorial/welcome.cfm). Furthermore, I applied relational approaches suitable for work with women who constitute a vulnerable population such as employing verbal consent (Bungay, 2008) and utilizing group

discussions (Bungay, Johnson, Boyd, Malchy, Buxton & Loudfoot, 2009) and I provide more detail in the sections below.

Informed Consent.

For the study I utilized a verbal approach to informed consent due to the fact that this research involved the participation of vulnerable groups. The rationale for this approach is gleaned from researchers (Bungay, 2008; Spittal, 2002) working with my population of interest that have found people who are street-involved, and experience significant stigma associated with their income and drug use status, are often reticent to activities requiring a written signature (Bungay). Thus, verbal consent is a more appropriate and respectful alternative (Bungay). Drawing on the work of others (Bungay) who have engaged in research with my population of interest, I utilized a one page summary identifying the purpose, research activities, rights of the participants, approximate time requirements, and honorarium details. The information in the summaries was reviewed verbally with each group with the encouragement of voicing any questions or concerns. I drafted an information sheet that was likewise reviewed with each group that outlined the details as described above (Appendix C). Verbal consent was then obtained from each participant prior to the initiation of any data collection.

Group Interviews.

The use of groups is well suited for this study as the interpersonal communication can highlight (sub)cultural values or group norms, as well as allow for exploration into people's knowledge and experiences (Kitzinger, 1995). A potential source for harm is present, however, in that the nature of the conversations elicited may produce emotional trauma for the participants (Tolich, 2009), especially with regards to women who experience oppression, violence and economic constraints. Tolich asserts that when utilizing a group setting in research, regardless of

the population, the availability of counselling services for participants is essential. Bungay (2008) provided referral to counselling or outreach services for the women involved in her study as the research entailed discussions pertaining to painful life situations. I therefore ensured I was aware of, and was in a position to refer participants to, appropriate counselling and outreach services if the need arose. Furthermore, the group interviews were held in one of the meeting rooms at VANDU, as this was determined to be a safe and comfortable environment for the participants. I always reminded participants that the sessions would be tape-recorded, but that all information shared would remain entirely confidential. I also reiterated to participants that they had the choice to leave the group at any time if they so desired.

Confidentiality.

A particular ethical issue to consider in the case of groups is confidentiality because the groups consist of more than one participant (Kitzinger, 1995). At the outset I asserted that each individual's contributions will be shared with both myself and the others in the group, and emphasized to participants that the information heard during the meeting is to be kept confidential, although I recognize the limitation in that I cannot control this once the participants have left the research setting (Kitzinger). Before the session commenced, I emphasized the concept of confidentiality with the group. I reiterated to participants that the session is completely confidential, and requested that participants do not discuss the contents of the session outside the group. I also used a number of strategies to ensure the highest level of confidentiality was maintained during the study. As Bungay (2008) applied in her study, each participant was assigned a numerical identification number and all information pertaining to identities was removed from any recorded data, computer files, or written documents. In accordance with UBC ethics protocols, all data files and documentation will be destroyed after a 5-year period.

Respectful Research Relationships.

Developing rapport and trust with research participants is crucial to conducting any study (Hall & Callery, 2001). I am a novice researcher, and thus cultivating my own strategies for developing respectful relationships with my participants was paramount to this study. As outlined by Bungay (2008), recognition of my own strengths and limitations within the research relationship was vital, and the application of the "researcher as learner" approach was fundamental to developing rapport. I have worked for a number of years as a community mental health outreach nurse in the DTES, which has provided the opportunity to develop relationships with women who use substances, live with extreme economic constraints, and experience violence and multiple forms of oppression. However, this is but a small window into the lives of these women as I have not personally lived this experience. My approach was that I was open with participants, and informed them of the work that I do in the DTES as a nurse, and my position as a researcher seeking to better understand women's needs and serve as an advocate to better the contextual circumstances that influence women's experiences with safer crack use. Enlisting the expertise of my supervisor as well as that of the staff at VANDU served to inform the development of respectful relationships between myself and the participants from the recruitment process to the point of data collection. As Bungay (2008) notes in her work, there are particular "rules of conduct" (p.84) when working with women who are street involved, including the concept of creating safe spaces and fair opportunity for each woman to speak if she so desires. It was thus my responsibility to ensure that all women present had equal opportunity to speak, and to encourage those who were quieter to share their perspectives and experiences. Additionally, eliciting the perspectives of the women themselves with regards to how they would prefer the findings be shared with the community was fundamental in establishing a trusting, respectful relationship.

Financial Honorariums.

There have been a number of ethical concerns raised regarding the use of honorariums, and the consequent messages sent to participants through their use (Bungay, 2008). Researchers working with my population of interest (Bungay) assert that women who participate in studies are living in extreme impoverished conditions, and by participating in the research, are consequently detracted from alternative means to obtain finances. Through discussion with my committee and drawing upon common practices for payment that are currently underway, the amount of \$20 was decided upon as appropriate for honorariums. Financial honoraria in DTES research projects are customary, with Bungay (2008) reporting subjects were reimbursed CAN \$20 for each study. After discussions with staff at VANDU, it was decided that the \$20 would be provided in increments of \$5, as to enhance safety of the participants because \$20 bills can attract unwanted attention in the DTES.

Rigour

This study sought to gain an understanding of the process of safer crack use amongst women in the DTES. Consequently, the phenomenon of interest is one of human experience which is unable to be made objective (Streubert Speziale & Carpenter, 2007). Qualitative research seeks to develop an understanding and provide a meaningful account of the complex perspectives and realities studied, in contrast to a finite, objective conclusion drawn as in quantitative inquiry (Cohen & Crabtree, 2008). Thus, qualitative research requires alternative, however equally stringent, adherence to protocols to ensure the results obtained are in the practice of "good science". Sandelowski (1986) communicated the ideas of Guba and Lincoln,

namely, the concept that credibility be the criterion against which the truth value of a qualitative study be evaluated. This approach asserts that a qualitative study is credible when it depicts such an accurate description or interpretation of a human experience that people who have had the experience would recognize it from the descriptions as their own. Consequently, it is the prerogative of qualitative researchers to apply strategies to establish such a level of credibility within their work (Guba and Lincoln 1981, as cited in Sandelowski, 1986). Therefore, I applied methods, described below, that ensured the experiences described in the findings of this study were a genuine depiction of the experiences of the participants.

The first strategy was the use of reflexivity. Hall and Cullery (2001) describe reflexivity as critically examining one's effect as a researcher on the research process, with a particular awareness to biases and presuppositions therein. Reflexivity is critical in the context of modern perspectives of grounded theory which state data are constructed within the relationship of researcher and participant (Hall & Cullery), as opposed to a mere reproduction of participants' realities (Glaser, 1992). I employed a critical eye in all stages of the research, by engaging in a constant reflective process with the information. Journaling provided the means to take note of my own ideas, reactions, and thoughts with regards to particular situations and concepts. Noting my perceptions allowed for further investigation into the concepts, by actively writing down ideas, returning to them, and re-evaluating the concepts in an attempt to strip away any biases I may have applied to the information (Hall & Cullery). Journaling also provided the means to keep a log of all issues I wished to further explore, their nuances I sought to tease out, and additional questions to ask participants. Furthermore, I often asked for clarification during the groups to ensure the information was what participants wanted to express, and that I was not in any way augmenting the meaning by virtue of my own biases. I was also aware and open to the

fact that the context of the group setting may have influenced the types of topics and the way the topics were discussed (Hall & Cullery).

The concept of relationality was the second strategy by which I strengthened the credibility of the study. Hall and Cullery (2001) drawing on Glaser & Strauss (1967) explain the importance of power relationships in grounded theory studies, particularly, the moral obligation of the researcher to emphasize equity in the power relationships with participants. This is the case as grounded theory offers a vehicle for change and control, therefore, the person who applies a substantive theory is in fact predicting and controlling others lives by the creation and application of the explanatory theory itself. As a result, relationality in the context of grounded theory work needs to embrace commitments to community along with new and emergent relationships between inquirer and respondent, with trust and respect at the core (Lincoln 1995 as cited in Hall & Cullery).

The first step for me was to establish rapport with the participants by providing information regarding my background and nursing involvement in the neighbourhood along with engaging in some informal conversation. I also developed rapport by providing a safe environment for the groups as well as beverages and nourishment for the participants as a reflection of my appreciation for their time and efforts. As a nurse, I work with women who are using crack cocaine and live in impoverished settings but I do not claim to understand the experiences of these women. However, what I do have is knowledge pertaining to the health needs of this population. I communicated that my goal was to work collaboratively with the participants to learn more about safer use, the factors that influence safer use, and for this knowledge to inform programming aimed at facilitating women's safer use practices.

Usefulness of the Research

The profession of nursing is dedicated to the principal of social justice, as outlined in the Code of Ethics for Registered Nurses (Canadian Nurses Association, 2008) which is in step with the philosophy of the Canadian health care system, stating the position of equal access to health care for all citizens (Canada Health Act Annual Report, 2009). Nurses working in outreach, mental health, and addictions within the DTES recognize that crack use is prevalent in the community, and that not everyone who engages in crack use is aware of strategies to minimize some of the harms associated with it. Community health nurses embrace and actively enact in their work the concept of health promotion and prevention (Shields, 1998) with The Ottawa Charter (p1) defining health promotion as the "process of enabling people to increase control over, and to improve their health" (World Health Organization, 1986). According to the Charter, health is a positive concept emphasizing social and personal resources, as well as physical capacities (World Health Organization).

As a result, health promotion is inclusive of a number of factors including personal and social resources within the community (Shields, 1998). Thus, for nurses to work at their full capacity, and provide the most comprehensive level of care possible, knowledge pertaining to women's safer crack use practices is necessary to facilitate women's strategies and connect women to appropriate services. To truly abide by the egalitarian values as emphasized in the Canada Health Act and Nursing Code of Ethics, this knowledge is crucial to improving the health outcomes of women living in the DTES who use crack. Nurses are currently a point of access to facilitate safer use practices and connect women to necessary services as they have unique access to, and trust from, individuals who are using substances (Limbu, 2008). Nurses working in outreach, for example, provide education and harm reduction services for hard to reach populations in impoverished areas such as sex industry workers and homeless individuals

(Hilton, Thompson, Moore-Dempsey & Janzen, 2000). However, there is a dearth of knowledge regarding how women are currently engaging in safer crack use practices. By conducting this study I aimed to shed some light on how women are minimizing the harms of crack cocaine, and what factors influence the process of safer crack use with the ultimate goal of improving health outcomes of women in the DTES.

CHAPTER FOUR: FINDINGS

Introduction

In this chapter, I chronicle how women engage in safer crack use practices in the DTES. In order to set the tone for a discussion of safer use, I first describe the women who took part in this study, taking note of their ages, housing, reported ethnicities, and income/economic situations. Here I also discuss the women's crack use in a broad sense, noting previous and present patterns of use and the factors in their lives that have influenced these patterns. Next, drawing on participant's experiences and stories, I introduce a preliminary theory of safer crack use. Here I note the actions taken by women to reduce the physical, psychological, emotional and interpersonal harms associated with crack. To illustrate the process involved with safer use, I identify the core category, or process, as caring for self and others. Furthermore, the theory illustrates how caring for self and others drives the development and implementation of the strategies used by women to limit harms. These strategies are effectively four thematic processes: establishing a safe personal place, building trusting relationships, learning about safer crack use, and accessing harm reduction equipment. The categories each contribute to safer use by dynamically influencing one another and illustrate that women's using safely is, in fact, a process of caring for self and others.

Situating the Participants

Over a six week period, 27 women participated in a total of seven focus groups held at VANDU in the DTES. Each group consisted of four participants, with the exception of one group that involved five participants, and another that involved three. The mean age of participants was 44.9 years of age, with a range of 22 to 59.5. The age group is a reflection of the fact that VANDU is not a youth-based service, and consequently, having only two participants

under the age of 30 was not unexpected. All participants were on Income Assistance, with 25 women indicating that they reside in the DTES, and two living outside of the neighbourhood. The demographic characteristics of the participants are presented in Table 1.

Table 1 Descriptive Characteristics of Study Participants

Variable	n
Age $n = 25$	4.98 <u>+</u> 9.78
Location of Residence	
DTES	25
Non-DTES	2
Living Arrangement	
Stable housing	25
Non-stable housing	2
Ethnicity	
Aboriginal	19
Euro/White	7
Other (specify)	1
Sexual Identity	
Female	25
Transgender	2
Other	0
Main Source of	
Income	
Public Assistance or Wel	Ifare 27

^{*}Note: The questionnaire defined stable housing as: "Do you have a regular place to live that you don't have to leave for a while?"

Of importance with regards to the sample is the fact that the majority of participants (70%) were Aboriginal. I use the term Aboriginal as defined in the Canadian Constitution, which includes individuals of First Nations, Metis, and Inuit descent (Government of Canada, 2002). The inclusion of a large proportion of Aboriginal participants occurred despite the fact that this was not intended to be a study of Aboriginal women and crack cocaine use. The observed majority of Aboriginal participants recruited for this research in the absence of any predetermined inclusion criteria pertaining to ethnicity necessitates acknowledgment of the impact of colonization and the effects consequently experienced by Aboriginal women in the DTES to this day. The overrepresentation of Aboriginal women in the sample is distressing, however not suprising given the demographic profile of the DTES, with 40% of the residents identified as Aboriginal (Robertson & Culhane, 2005). Furthermore, researchers (Benoit, Carroll & Chaudhry; Culhane, 2004; Varcoe & Dick, 2007) have illustrated that the colonial enterprise has contributed to the large percentage of Aboriginal women residing in the DTES. Most of these women live in impoverished conditions, use street drugs, and engage in street-level sex work out of economic necessity.

Patterns of Crack Use

To participate in this study, women were required to have smoked crack within 30 days. What became clear was that despite the fact that all women were using crack on a regular basis, there was an incredible diversity in patterns of use across individuals. Through analyzing the data I became keenly aware that crack use is not a defining feature of the participants' lives; rather, it simply exists as one element amongst many in the women's lives. Although all women used crack on a regular basis, use was tied into other facets of life that contribute to, discourage, and organize use. A prevalent theme with regards to contributing factors was using crack as a

means to manage chronic pain stemming from debilitating physical health issues including cancer, HIV, rheumatoid arthritis and osteoarthritis. Many women stated that although crack only alleviated pain for short periods of time, the reprieve felt from the daily experience of pain was tremendously effective. Some participants emphasized that they do not use pain medication prescribed by a physician as this was not found to be useful; however, crack provided powerful relief from discomfort:

P06: Like I've got a really bad back and I deal with the osteoarthritis and I, I got a sciatic nerve. Anyway, when I smoke up I feel it (the crack) go right down my spine and go right out and then I feel good...For my pain, yes, I don't take anything else for my pain.

Issues regarding the physical body surfaced as another influential factor with regards to crack use, but this time, contributed to decreasing frequency of use. Based on the fact that many of the women who participated in the study were over the age of 40, a number of them had been using for upwards of 10 years. As a result, a common motif with regards to changing patterns of use was what women communicated as the impact of the aging process. Participants found that when they were younger use was heavier, more consistent, and often a daily endeavour:

P11: When I first started it was very social you know...I got into it heavy...I mean, I'd stay up for days on end and you know, didn't eat properly, I let myself go, you know, and didn't, like, always bathe as much as I should and I was just losing track of time completely...

However, women shared that intensive day-to-day use ceased over the years due to the inability of the body to "keep up" with daily crack use. Participants elaborated that everyday use entails sleep and nutritional deprivation of which the effects, over time, become too great for the body to withstand. Some women shared experiences such as an overdose or hospitalization due to physical ailments that ultimately led to the decision to cut back on crack use as means of physical preservation:

P11: Physically too, like, I almost died because I guess that was, yeah, that was the turning point, yeah, that was it. They called it a complicated case of pneumonia and I had to have my lungs, both my lungs operated on and I was in the hospital for two months with that and like I was on death's doorstep from that. And anyway, you know, like it sank in, you know, that I just couldn't take it anymore, I was getting too old for it.

Some participants shared that they decreased their crack use not due to physical damage, but rather as a means to preserve the novelty of crack use. For some, using on a daily basis led to the drug losing its appeal, and thus to maintain enjoyment, use became more intermittent.

In addition to factors that served to decrease use, there were many identified aspects of women's lives that served to organize patterns of use, the most prevalent being the prioritization of family. Many participants shared that husbands, children, grandchildren, and even pets had served to shift their focus on crack use to that of other family-oriented activities. Some participants identified having spouses or partners with physical ailments, and taking on caregiving roles which consequently required more of their time and energy and ultimately resulted in less crack use. Furthermore, having children and grandchildren around on a regular basis also contributed to shifting patterns of use. Participants identified choosing not to use in the presence of young children as there were a number of inherent risks including children finding and playing with their equipment (crack pipes, lighters, Brillo®) and concern that the psychological effects of crack would impede their ability to provide full and undivided attention.

The concept of requiring complete mental focus also came up in statements made by participants with regards to work and volunteer pursuits. Many of the women were actively involved with programs and initiatives offered by VANDU, and were also working at various community organizations such as the Carnegie Centre, Sex Workers United Against Violence (SWUAV), Providing Alternatives Counselling and Education (PACE) and the Vancouver Injection Drug Users Society (VIDUS). The Carnegie is a community centre located in the heart

of the DTES that offers a variety of services including a kitchen, weight room, senior's centre and library. Both SWUAV and PACE are advocacy groups run by previous and current sex workers to advocate for policy reforms to improve safety and working conditions for women involved in sex work in the DTES. PACE also provides low barrier programming (including harm reduction education), support and safe respite for women who are involved in sex work in the neighbourhood. Lastly, VIDUS is the Urban Health Research Initiative's longest running cohort study on injection drug use, but also provides regular HIV and Hepatitis C testing (including pre and post-test counselling) to local individuals who are using injection drugs.

Roles and responsibilities related to these organizations ranged from leading support groups for women to engaging in outreach activities with the homeless. Participants emphatically stated that they chose not to use while working as it distracted from their roles and responsibilities by impacting the ability to think clearly and react quickly when necessary. Use was reserved for personal recreation:

P25: Because you know during the week I just don't do it, I feel that it's very important to be productive during the week. I don't know, it's just in me to be that way. During the week I do productive things I just forget about all that. Then on weekends, I do it.

A number of participants concurred and added that use takes place during their personal time, in which they engage in solitary activities such as art, painting and reading.

Overall, a realization regarding the supplementary as opposed to primary role of crack use in women's lives became fundamentally clear through conversations in the group interviews. I began to see that patterns of use changed over time to incorporate a variety of responsibilities and activities that now coexisted with regular crack use. The women expressed a sense of control over their lives by organizing use amongst other responsibilities. They were completely honest in that most had no intention of quitting, but the nature of their use had, for many, shifted from a

daily pursuit that once consumed every moment, to an activity that coincided amidst numerous others. As the conversations in the groups progressed, I focused more on understanding how crack use patterns had changed with regards to limiting the harms associated with use. Next, I describe a theory of safer crack use for women, and how safer use practices unfolded over time.

Theorizing About Safer Crack Use

All the women that took part in this study were concerned with safer crack use and as such, safer use manifested in a variety of ways. Participants expressed an acute awareness of the various harms of crack cocaine such as infections and burns coupled with a dedication to incorporate practices that would serve to limit some of the identified harms. These strategies were adopted with the incentive of enhancing physical health, as the goal was never to cease crack use altogether. The approach to modifying crack use practices to limit harms is very much in step with Tatarsky's (1998) conceptualization of harm reduction: a pragmatic approach to substance use, recognizing consequences vary along a continuum of harmful effects for the user. What Tatarsky outlines is precisely how the participants conceptualize use: acknowledging the numerous risks of using crack but taking action to minimize some of them.

Theorizing about safer crack use provides an understanding as to how crack use practices changed from the outset to present day. The sharing of stories, perspectives and experiences by the participants illuminated four thematic processes which intersect to influence safer use: establishing a safe place, building trusting relationships, learning about safer crack use and accessing equipment and resources. However, it is the central phenomenon of caring for self and others situated within the contextual circumstances influencing women's lives and their relationships with others that occupies the core of each of these thematic processes and serves to drive and shape them as a means to developing and incorporating safer use practices. Caring for

self and others as a core process promotes the development and utilization of the four thematic processes in an effort to use crack in a safer way.

Caring.

Caring, from a philosophical and analytical standpoint, denotes a primary mode of being in the world, which is natural for humans and is of crucial importance in our relationships with both others and ourselves (Griffin, 1983). To elucidate this point, Waterhouse (1981) provides a critique of Heidegger's nascent analysis of human existence (*Sorge*) which is translated as "care". Care represents a primary concept because in the absence of "care" nothing matters; however, something always matters, and that something is the self, and subsequently, others in the life of that individual (Waterhouse). This notion of "mattering" structures the world for people, determines interests in things, relations with others, and represents the basis of all motivation (Waterhouse). Caring has been understood as a continuum, beginning with interest, and building towards concern, guidance and protection (Griffin). With regards to safer crack use, it became clear that women were exemplifying interest, guidance and protection for both their own selves as well as others by applying various strategies to reduce some of the harms associated with crack use:

P26: People can just do it (crack) every day and it's all they live for. But I have children and I have kittens and cats and I have my pride you know. So I can't be using it every day you know what I mean?

The notion of self has perplexed theorists for centuries as many have grappled with developing a definition. For the purposes of this study, I have drawn on the work of George Herbert Mead (1934), who articulated self as "that conscious thinking thing, whatever substance made up of, (whether spiritual or material, simple or compounded, it matters not) which is sensible or conscious of pleasure or pain, capable of happiness or misery, and so is concerned for

itself, as far as that consciousness extends" (p. 216). Mead rationalizes the utilization of the terms "I" and "Me" to identify the self, based on the understanding that it is understood as separate from others. However, it is crucial to note that because humans are inherently social beings, the self does not develop independent of interaction with others (Decety & Sommerville, 2003). Rather, the self relies heavily on shared representations between self and others, a notion emphasized greatly in developmental science and social psychology (Decety & Sommerville). Others thus represent those entities outside the realm of the self in peoples' lives (Mead) and may include spouses, romantic partners, friends, peers, work/volunteer colleagues, pets, and so forth as demonstrated in this study. Women's actions over time demonstrated that both their own selves and others "mattered", necessitating a focus and interest in cultivating relationships with their own selves and with others in order to care for them.

Caring for self and others is therefore contingent upon developing and maintaining relationships with one's self as well as the others in an individual's life. Consequently, women's relationships were identified as a central tenet to this theory by providing the framework for the development and implementation of the central processes. In the absence of relationships with others, it would not be possible for women to establish a safe place, develop therapeutic relationships, learn about safer crack use, or access equipment and resources to limit the harms associated with crack. Relationships are the vehicle by which caring for self and others may occur, as much of what women do to reduce harms is rooted in interactions and relationships with the others in their lives.

This central process of caring for self and others provides the foundation for the four identified thematic processes. The relationship is akin to a tapestry: the four thematic processes are represented by four coloured threads, each a unique shade, that, when woven together,

produce an image. However, the central phenomenon of caring for self and others represents the very fabric of the thread itself, as it provides the base substance for the colours to interact and create the image. The thematic processes are the manifestations of caring for oneself and others. In this study, I, in fact, conceptualize the process of safer crack use *as* caring for self and others which became evident as women described incorporating the four identified thematic processes on a day-to-day basis. Women demonstrated self and others "mattering", by putting efforts into reducing some of the harms associated with crack. In the next section I elaborate on the interconnectedness of the thematic processes, and emphasize how caring for self and others acts as the driving force that fuels them.

Caring for Self and Others through Establishing a Safe, Personal Place.

In order for women to care for the self and others when using crack, a safe personal place was identified as crucial due to the omnipotent nature of violence in the lives of participants.

Many women recounted having had experienced violence and physical harm when using crack, and that these incidents often entailed aggressive assaults in the neighbourhood in which others used physical force to rob women of their money or other belongings, including drugs. Because of negative experiences outdoors, women often identified using crack exclusively in their homes. Using at home allowed women to exercise control over the environment, most notably, who was permitted entry so as to prevent the opportunity for others to inflict violence and threaten the self. Some women identified exclusively using alone due to negative past experiences using with others. Participants shared that crack had the ability to greatly change the presentation of people, including those considered to be close friends. The unpredictable effects of crack sometimes manifest as intrusive and violent interactions, and these incidents had at times occurred in the actual homes of participants:

P009: I had this one time this guy came over, a good friend of mine, he'd keep the dope on him like he thought I was stealing it, I wouldn't steal I'm not like that, right? So anyway, he started picking up my floor, got my carpet like digging and digging and then I went to the bathroom I come back, he went through all my drawers in my room and stole stuff. It's just very uncomfortable, right? So I don't invite people over anymore, I do it myself.

Due to feeling their personal place had been violated, and as a means to care for the self, many women opted to use alone in their homes to minimize the possibility of harm. Some participants, however, identified using with one or two close companions, often a spouse, romantic partner, or close friend. In all cases, when women used with others, trust and safety were established through successive instances of using together in which there was never a breach of personal safety.

The safe personal places women identified were always articulated as being indoors because being outside inhibited a woman's ability to be safe and care for the self. The outdoor environment of alleyways and street corners where crack use is prevalent in the DTES were described as dangerous and unpredictable, and as a result most women refused to use outdoors. Participants shared that when outside there was constant worry of being mugged or assaulted:

P10: People are always looking at you and wait until you're frigging high so they can rob you.

Furthermore, participants shared that by using crack outside, you exposed yourself to people in the community, and were a potential target for harassment by others looking for drugs or money. The dangers of the outside environment also included random acts of hostility that were not directed at any one person in particular. One participant articulated having been in an alleyway when an angry hotel tenant thrust a television set out the window into the laneway below. Such events were described as somewhat commonplace in the DTES, and thus by using crack outside, you were putting yourself at risk:

P17: Because if you're out there and you're using and you're under the influence and your mind isn't functioning very well, when you're walking through a laneway you aren't thinking about paying attention to what is going on around you.

The unpredictability of the outdoor environment was also viewed as contributing to more sporadic crack use patterns. One participant highlighted that by ceasing to use outside, the unpredictability of the outside environment was eliminated, and consequently her crack use became more organized:

P12: I don't hang out in the alleys and smoke in the alleys and stuff like that anymore. And that makes a big difference in my whole life because my drug use is inside at home and that I'm not like all over the frigging place. Like just because of that, I keep more regular hours and stuff...Like, if you're hanging in the laneways it was sort of more spontaneous whatever happened.

Police activity was cited as another danger, with women constantly fearing arrest. A number of participants recollected having their crack pipes smashed on the pavement by law enforcement officers and expressed the humiliation they felt, not to mention frustration around having to obtain a new pipe:

P16: That's the worst, having your pipe broken in front of you, or them (the police) making you step on it yourself.

An additional danger of the outside environment articulated by participants was the idea of this environment being filthy and riddled with bacteria; consequently, exposing women to additional health risks by using in it. Participants thus emphasized that by having your own personal place indoors, you can better care for yourself by minimizing the risk of touching something harmful or mistakenly putting something other than crack in your pipe. Resultantly, the indoors were seen as a safer environment where certain risk factors could be controlled and even eliminated by keeping a clean space free of harms such as glass and other hazards. This notion of health risk was of particular relevance due to the fact that many individuals who use crack tend to engage in "tweaking". Tweaking was defined by the women as a preoccupation

with finding small pieces of crack that may have fallen in the nearby vicinity. Individuals who are tweaking may be seen vigilantly scouring the ground with their heads down using their fingers to dig around in the pavement in hopes of locating bits of crack. Thus, tweaking outdoors presents risks in that you may reach to the ground and rifle around in bits of glass, dirt, bacteria or even dirty needles. Participants shared having inadvertently put substances other than crack into their pipes when tweaking, including pieces of dirt and bird feces.

Caring for Self and Others by Building Trusting Relationships.

The next major theme with regards to using more safely was building trusting relationships to care for self and others. I emphasize that relationships are the vehicle by which women exercise caring for the self and others. By developing and cultivating a relationship with the self, and also with others in the community, women had the opportunity to put caring into action by engaging in safer use practices. Relationships, however, were complex and paradoxical with regards to influencing safer as many participants had endured very negative experiences with others, often involving violence. As a result, women frequently approached relationships with a great deal of scrutiny to ensure that the connection they were building with the other person was one of trust and support. Once trust was established, however, women emphasized that the camaraderie and support of others was a major contributor to safer use by limiting the potential for violence and providing learning opportunities about minimizing harms as well as resources in the neighbourhood.

Being in the company of trusted individuals in the context of using crack was paramount to caring for the self by minimizing the possibility of violence or aggression and eliminated the sense of worry or fear that many women articulated feeling when using with others they did not know:

P07: That's why I pick my people, I keep them in my back pocket because I need to. You see, for me, if I have good friends and people that I trust then my trips are good when I smoke because I don't have anything to be paranoid about.

Another woman added to this point:

P19: And I watch who I smoke with because people get really freaky, you know? And some of them get paranoid, yeah, and they get violent. So I'm really careful who I smoke with.

The process of applying caution when deciding who to use with was greatly influenced by previous personal experience. For those participants that refused to use with others, the decision was largely experientially based:

P05: I use strictly in my house and alone because everybody is, you just don't know, you know, you can't think that someone is going to be your friend when you have drugs and money in your pocket.

When women surrounded themselves with trusted individuals it also served to create an environment that not only protected them from violence, but was supportive of safer use practices. Using with close others were aware of the risks associated with sharing equipment and thus being asked to share simply didn't happen. If a woman was asked, however, women's caring for each other's health would permit refusal to share without hard feelings:

P05: I know them (the women I use with) and I know they respect me and I respect them so I know that...the dynamic it's okay, there's an understanding why you're not able to (share).

In carefully navigating personal relationships, women emphasized the importance of exercising caution when offered crack by others. Participants warned of the potential dangers associated with taking the offer from someone that you do not have an established, trusting relationship with. It appeared that the offer of crack from an individual who was not well known was always viewed as having some sort of ulterior motive:

P20: And 90% of the time I say no to people who offer me crack because there is always, always something attached to it. I say no. I've had people throw crack at me, you know,

I've had situations like that.

Theft was a common theme with regards to using with others, and another reason why some women opted to use alone. Theft was mainly an issue with regards to the outdoor environment as noted before, but it was not limited to the outdoors as some women had experienced theft in their own homes. Some women expressed a deep sense of mistrust of most people, having had multiple negative experiences with others. One woman shared her limited tolerance for wrongdoing from others:

P19: Well, I usually check somebody out. The first time they screw me, that's it. I don't give no-one the opportunity to do anything.

Some women, sadly, had withstood countless acts of violence and betrayal from people in their lives. This served to greatly impede the ability to develop any kind of friendship with others and was articulated as a mode of self preservation. By exclusively using alone at all times, there was never the opportunity for others to do harm unto them, as one woman shared:

P20: You know 'cause one thing I learned is that any kind of drug has no friends. I've only been smoking crack for like two years, okay? One thing I see and I learned. Crack, heroin, whatever, crystal meth, pills they have no friends. You have no friends.

Despite some women openly expressing their preference to use alone, and avoidance of congregating with others in general due to a deep sense of mistrust, many women in the groups identified having built solid support networks of trusted individuals. Furthermore, many women who were involved with VANDU expressed their desire to reach out to other women in the community, especially young women, and connect them with supportive services and an opportunity to make some money:

P08: We did have a workshop and we went out and gathered them (women), we had to give them seven bucks each but it, you know what, now they're proud. They're proud just to make that, you know, that seven dollars. Anyway, and then now they come in to smoke or whatever, you know.

Ultimately, there was a sense of camaraderie amongst participants, with women caring for each other by supporting and encouraging the sharing of experiences and stories, and respecting other's opinions. This was an opportunity to care for the self by receiving support and encouragement from a positive group of women. Participants would often nod in agreement, put their arms around each other, or simply encourage one another to express their opinions, even if they were not always in agreement.

This camaraderie and caring that women demonstrated for each other's well-being did, however, influence safer use by creating somewhat of a paradox. This was most evident in women's comments about sharing their pipe, which in contrast is a less safe practice. One participant provided insight into how women's caring for others had the potential to inadvertently lead to harm:

P08: Because they will (share), because they want to have that dope, and they know what it feels like to not be able to, so they share.

Women expressed knowing how it felt to really need a "hoot" (taking a puff from the crack pipe) and thus would out of empathy offer to share their pipe with another who was asking. The idea that pipe etiquette provided a barrier to safer use was however mitigated by a knowledgeable discussion about the risks of sharing equipment whereby caring for self and others took precedence. In this case, women recognized that although they were being supportive in offering their crack to another woman in need, they were inadvertently exposing both themselves and the other person to harm in the way of potential spread of infection.

Learning about Safer Crack Use to Care for the Self and Others.

The process of how women internalized and consequently applied new information pertaining to harm reduction practices was described as a process of learning. To care for the self and others, learning about the harms associated with crack use and how to subsequently reduce

those harms was fundamental. The way participants gained new understandings around harm reduction approaches, services, and resources occurred via three major sources: personal experience, informal learning, and formal learning.

Personal Experience.

The negative experiences women had were a major theme that surfaced with regards to the motivation for changing crack use practices. Many women attributed contracting an infection from sharing a crack pipe, and the infections ranged from those of lesser severity such as a cold sore (Herpes Simplex virus) to more serious infections including pneumonia, TB and Hepatitis C. Participants recounted their experiences with treatments for the infections and expressed how they wanted to ensure they never passed infections to others and thus maintained strict principles related to the sharing of pipes. Several participants even raised the previous H1N1 flu pandemic as another reason to refrain from sharing pipes. In the fall of 2009, Vancouver experienced a number of cases of H1N1, more commonly known as the "swine flu" as it was originally detected in pigs (UBC Department of Health, Safety & Environment, 2010). The virus became a major public health threat because, despite having similar symptoms to the common flu (including fever, cough and headache), H1N1had the potential to be fatal; particularly, with regards to young children, the elderly, and immunocompromised individuals (UBC Department of Health, Safety & Environment).

Previous experiences with drugs other than crack also served as strong motivators to change practices. One participant recounted how she lost her eye due to an infection through a practice she engaged in while using heroin:

P04: I, I lost my eye because when I was doing heroin, I would share with my girlfriend and this is really sick, I wouldn't talk about this. But, um, fourteen, sixteen years ago and she, she would always take so long that I'd yeah, I'd do a quick hit of her blood. So I was down to 98 pounds, I was really sick and the weakest part of your body, I had no immune

system, so it shut down, and it went to the weakest part of my body, which is my left eye. They had to take it out, they thought it was flesh eating disease.

Even though this participant was using a different drug, and different equipment, the physical trauma of her experience led to newfound knowledge with regards to disease transmission and sharing of drug equipment. As a result, her experience translated into her drug use generally, and explained in part her refusal to share her pipe.

Another recurrent theme with regards to personal experience was having inhaled pieces of Brillo ®. Brillo® is essentially metal mesh that is put in the pipe to keep the crack in place while inhaling. Sometimes when using crack, a burning piece of mesh Brillo® would be unintentionally inhaled, and make contact with the mouth, throat, or both. Women recounted this experience as extremely painful, often resulting in blistering and bleeding, and at times required hospitalization. Consequently, this experience led to changing practices for some:

P08: I'm a firm screen user now and it's just because of using it and seeing that I don't suck it (the Brillo®) through, pieces don't come through and I feel so much better after smoking a ball through a screen than I do through Brillo® because then I've sucked in so much Brillo®.

Some women noted that simply having supported a peer through an experience such as inhaling Brillo ®, or illness related to crack use, often served as motivation to change their own practices. Most notably, was the refusal to share pipes when using; however, shifts also included using Pyrex® rather than glass pipes, using mouthpieces and changing from Brillo® to screens. Several participants demonstrated caring for others by refusing to share equipment for concern over potentially exposing others to infection:

P14: If you do share a pipe make sure you use a mouthpiece...I don't want to be the one responsible for getting someone sick.

Another participant attributed a current infection to having had shared and thus she refused to share equipment:

P15: So now that I know what's wrong with me I let them know and if they get upset I just let them know I say, look, this is what is wrong with me and I don't want that to happen to you because I'd have to live with it the rest of my life.

Sometimes, observations were of a lesser degree of intensity, such as one participant who stated that merely witnessing someone drool in her pipe was enough to stop her from sharing. Subsequently, she has attended a number of harm reduction workshops and learned about the spread of infections through sharing of equipment, but the initial motivation to cease sharing was the visual of someone else's saliva in her pipe. It became evident that women's interactions with each other served as an important medium for the sharing of information with regards to safer use practices. These interactions serve as the next major category with regards to learning.

Informal Learning.

Acquiring and disseminating knowledge about minimizing the risks associated with crack was another way the women cared for themselves and others. Through examining the data around knowledge acquisition it became evident that there were two major categories for learning: informal and formal. Here I draw on Livingstone's (1999) definition of informal learning: "any activity involving the pursuit of understanding, knowledge or skill which occurs outside the curricula of educational institutions or the course of workshops offered by educational or social agencies" (p.51). Learning in this context was largely the result of interactions with friends, romantic partners, as well as peers. To be clear, a peer, as outlined in the SCORE Project (2007), is an individual closely associated with the DTES community, and currently using crack. Formal learning, on the other hand, is defined as the pursuit of knowledge which does occur within the curricula of educational institutions or social agencies (Livingstone). In the context of the DTES, examples of agencies include VANDU, SWUAV and PACE.

The concept of learning, both in an informal and formal sense was greatly impacted by relationships, (the previously discussed thematic process) in women's lives and elucidates women's propensity to care for each other. Many women expressed that they learned how to limit some of the harms associated with crack via information provided by friends or romantic partners. The concept of "word of mouth" was mentioned frequently with regards to how knowledge pertaining to the spread of infections, and how to consequently limit this harm, was obtained. Friends would adopt the practice of never sharing pipes, or incorporating mouthpieces into their use, and the rationale around this new practice would be shared with others in the community as a means to care for one another.

A chain reaction thus developed with groups of women acquiring knowledge from each other around the importance of never using someone else's pipe, or carrying a mouthpiece, in order to prevent the spread of infections. This sharing of information proved an integral aspect to caring for the self by providing women with the knowledge necessary to prevent harms. The application of this knowledge, however, was very much impacted by the availability of equipment, which will be discussed later.

Learning how to rid the crack of impurities was another practice participants often spoke of. Many women noted that they learned from one (or a combination of) romantic partners, friends and peers how to check the crack itself for impurities, which is a form of harm reduction practice as women emphasized the growing issue of harmful "fillers" being added to the crack sold in the DTES. Participants disclosed many substances that are known to be added to crack to increase the bulk of the drug and thereby increase profit for drug dealers. Because crack cocaine is an illegal substance, it is not subject to regulatory standards, and as such, the presence of impurities is a common and growing issue noted by participants. This issue has also been cited in

other research based out of the DTES (Bungay, Johnson, Boyd, Buxton Malchy & Loudfoot, 2009; SCORE Project 2007). Among these impurities, as articulated by one participant, are:

P26: There is almost 75% people down here that are dealers that don't have real rock. It's all propane, and some of it is Oragel® with Crest® and Tylenol®, and all that crazy stuff they do to make a buck.

Other women communicated a number of dangerous additives with serious health consequences currently being added to the crack sold to increase bulk including speed, crystal meth and the pig de-worming medication used by veterinarians called levamasol. The combination of additional stimulants (speed and crystal methamphetamine) poses marked health hazards due to the exposure of the body to confounded stimulant effects. One participant shared the effects of these impurities for women's health:

P15: And my friend told me today she says, I bought some stuff yesterday, she says it's really weird. And she said another friend came along and had to pick her up off the floor, she collapsed on the floor.

Consequently, women cared for the self by learning and adopting practices to eliminate some of the harmful added substances. For example, one practice used as a means to rid some of the additives in the crack was identified as "re-cooking" the purchased crack as a method to purify it. This endeavour necessitates taking the time to re-heat the crack to burn off excess, and potentially harmful, filler substances that had been added in. The rationale given for this practice elucidates caring for the self:

P25: I used to use the drug, the rock, without ever checking it or anything. Literally, just shoving it in my pipe and smoking it. How I've changed is over the years is that I re-cook it, and make sure that everything is out of there except what I actually wanted to purchase.

Simply inspecting the crack before smoking it was also a practice that women adhered to and learned from friends and peers. Although many impurities are not visible to the naked eye, it was possible to identify areas of discoloration or foreign objects within the crack by looking it over before smoking it.

Another aspect of informal learning was the observation of women engaging in informal information sessions during the actual focus groups in the course of this study. The learning process was greatly impacted by the involvement of friends and peers in informal learning settings. While this was discussed in an earlier section, I will describe in greater detail here the informal sharing of harm reduction information that unfolded within the context of the focus groups as a key aspect of learning. Women often commented on learning about specific harm reduction practices such as mouthpieces or not sharing pipes through conversations with friends. What became evident was that women's conversations with each other around use were, in fact, a form of dissemination of harm reduction practices. At the heart of these conversations was the process of women caring for each other by expressing genuine concern for one another's well-being and thus exhibiting the core process of caring for others. Women made reference to their support networks in the community, and how these networks kept everyone up to date with new services, resources or events. What was particularly relevant was witnessing participants actively sharing harm reduction information with each other at the focus groups.

During all seven focus groups I noted that within each, participants would begin to share information with each other about resources or methods they incorporated to limit the harms of crack use, as well as harm reduction resources in the area. This exchange of information would spontaneously evolve as women were answering the questions I posed around harm reduction and was a powerful display of women caring for each other. For example, one participant who was new to the neighbourhood asked where others in the group obtained their crack pipes and several participants enthusiastically provided information:

P18: You can get pipes at WISH. But you know the RainCity van? They only carry 15 pipes, if you try and get there that's real Pyrex® pipes from RainCity.

P17: They're two vans, there is the white van and the other van she's talking about, the black van with kits. The kits has a pushstick, a lighter, a pipe, alcohol swabs, screens, condoms and band-aids.

P16: Come to VANDU, it's \$2 for a pipe.

Most women were a wealth of knowledge about such resources, with some having more extensive knowledge than others.

At one time or another during the groups a detailed conversation erupted about resources, locations, dates and times, with participants expressing gratitude to one another for the wisdom. For example, one participant shared a tactic she employs to stop screens from sliding around inside the crack pipe, information that was appreciated by another group member:

P16: I use, like I burn the brillo, then I soak it in the ash and then put it on top. Then I use the screen, I use three screens and put them in the bottom.

P17: I do use the screens, but I didn't ever use both together. I never heard of that before you mentioned it. I'll try that one day.

Watching these interactions I witnessed a great sense of caring and compassion that participants expressed toward one another, with gentle head nodding to express understanding, and utterances of encouragement and support. When one participant shared her experience of how she began to incorporate safer use practices, one of the other participants stated "Good for you. You go, girl" while the others at the table nodded their encouragement. Women were eager to share information and ensure that all present were well aware of the resources in the neighbourhood. Not only do personal relationships provide a vehicle by which to discover new information around harm reduction practices and resources, the compassion and support women expressed to one another was an important aspect of internalizing and applying the new knowledge and demonstrated the reciprocity of caring. Women acknowledged the support of others and were

thus open to suggestions, tips, strategies, and above all, details with regards to sites and resources.

The active sharing of information within the focus groups often involved women who were a form of "key informant" due to their extensive involvement in community groups. These participants shared valuable information with regards to resources and programs to other participants in the group. There was a sense of comfort and safety the women felt in the groups as evidenced by the ease with which they shared personal, and often unpleasant, experiences with each other. Consequently, women were comfortable asking each other questions and were happy to share with each other information about safer practices and resources. The resources, such as women's support groups, harm reduction workshops, and sites to obtain equipment, served as a major component of the next method of learning noted.

Formal Learning.

Formal learning in the context of this study involved having received information about harm reduction in a formal workshop, support group, education session, or from interaction with a health care professional. Formal learning provided the knowledge necessary for women to care for themselves and others. Most all of the women who participated were actively involved with groups at VANDU, mostly the Women's Group held on Saturdays. The group, amongst other things, provides education with regards to drug use and harm reduction. A number of women were also employed at VANDU, and thus had regular exposure to harm reduction through involvement in harm reduction teaching sessions. Many of the women, however, had also received formal harm reduction education elsewhere in the community, from programs such as SWUAV, PACE and VIDUS. Furthermore, some women had learned about harm reduction through interactions with health care professionals at various health centres in the neighbourhood

such as the Downtown Health Clinic. This information was crucial for women to actively care for themselves and others by gaining a solid understanding around the harms associated with crack use, and how to consequently reduce those harms.

The women spoke highly of the harm reduction workshops/education sessions they attended stating that they were very helpful and informative:

P13: Because I didn't know nothing about that because I used to share right when I had my place down here, downtown right? And you end up thinking about it too, eh, with all the sharing and all that you end up changing your mind because you don't want to get sick, eh? You want to stay healthy and it's good to hear about it, good to learn about that.

Participants appreciated the non-judgemental approach of staff that ran the sessions, and felt comfortable asking questions and receiving guidance with regards to certain practices. This approach to health service illuminates care by others, and is essential to promoting women's efforts to care for the self and others. For example, the staff at VANDU instruct individuals how to properly place a screen into a crack pipe and how to use a mouthpiece. Participants also commented on the use of photographs and pictures of various illnesses (especially mouth sores and infections) that can be contracted from sharing pipes as a very powerful learning tool. Having a "visual" to see what can happen as a result of sharing pipes was emphasized as an effective teaching approach.

When women were asked how they came into contact with harm reduction workshops or education sessions, the ever-present motif of networking amongst friends and peers, and thus caring for others in the community, was made visible again. Just as the case was with harm reduction information shared amongst friends and peers in an informal fashion due to the "tight-knit" nature of the community, such was the method by which many of the women gained access to formal harm reduction learning forums. In getting connected to resources, participants made reference to "word of mouth" along with the notion that "people talk", fuelling the spread of

information pertaining to organizations in the community providing valuable information around safer crack use as well as equipment to safely use. As elucidated by one participant, when asked how she came into contact with VANDU:

P26: Through a friend, you know? Through D.W., see that guy right there (pointing to a picture on the wall)...Yeah, he told me where my cousin was and about VANDU. I have a lot of respect for D.W. and A.L. to this day.

This idea of the relational aspect of women's lives greatly contributing to safer practices is again observed, shedding light on the influence of relationships within the sphere of learning, and the importance of relationships in not only informal learning, but creating the link to facilities where formal learning occurs. Once women, through networking, made contact with a resource this was often how accessing equipment (the final thematic process) was obtained. Thus, the relational aspect of women's safety impacts access to, and use of, equipment as these organizations and resources that participants shared with each other were often also the providers of equipment.

Accessing Safer Use Equipment to Care for the Self and Others.

For women to apply safer crack use practices to care for the self, participants emphasized the need for accessibility to equipment. In order to banish the practice of sharing pipes, for example, women stressed that it must be possible to obtain a pipe or a mouthpiece with relative ease. A prevalent theme was that limited resources greatly impeded women's ability to care for themselves and practice safer use. Women articulated that at present there are shortcomings to the services that currently provide equipment for safer crack use.

For example, Women In Safe Haven (WISH), a women's shelter located in the DTES, was identified as a site to obtain pipes as it reportedly receives "shipments from a van". In conversation with a physician epidemiologist for provincial harm reduction services I was

informed that the Vancouver Coastal Health Authority (VCH) provides supplies such as pipes for a number of agencies in the DTES such as WISH. However, participants asserted that there are a limited number of pipes delivered and a very large demand for them. Consequently, WISH often runs out of pipes before everyone in need receives one. A similar situation was discussed with regards to an alternate van, believed to be the RainCity van, that distributes crack kits (complete with a pipe, screen, lighter, pushstick, condoms and band-aids) to individuals on the streets.

RainCity is a grassroots organization that provides housing and other supports for individuals living with addictions, mental illness and other health and social issues. However, once again, participants noted that this van would often run out of kits before everyone received one. The kits were highly valued as participants concurred that they contained "everything you need" to practice safer crack use as they included the essential components highlighted above: pipe, screen, lighter, pushstick, condoms and band-aids. Participants highlighted that this van makes appearances rather intermittently, and as of late it has been much more infrequent:

P17: The vans used to come around every day, but I haven't seen them now for like three weeks.

As communicated by the physician epidemiologist, VCC does provide supplies for a number of organizations in the DTES, but the level of support to each varies over time, and the supply is always subject to health care system restraints. These observations suggest a decrease in resources which are essential for women to engage in safer use practices and consequently, a barrier to caring for the self. The education around safer use practices that women receive from informal and formal settings is greatly restricted if the equipment needed for safer use is not readily available and accessible.

Another valuable resource noted to have limitation was VANDU as pipes are available for \$2. However, VANDU closes at midnight Monday to Friday, and has limited hours on weekends (four pm to midnight). Thus, after midnight, it can be very difficult to find a place to obtain a pipe, other than from people selling them on the streets. Moreover, as articulated by on participant, "it can get pretty expensive" as pipes on the streets were generally sold at upwards of \$4 or \$5. In comparison to \$2 at VANDU, this is a large increase for women who are on fixed incomes and thus must use up their scarce resources to purchase a pipe. Furthermore, the late evening/early morning hours were stated to be popular for many women who use crack cocaine in the area. As stated by one woman:

P12: The late hours, yeah, and that's when there's a lot of desperate people out there, like I always said if I was a dealer, if I ever sold that stuff I'd sell it between three and six in the morning...It's because they started using during the day and they haven't come down yet and they want to keep going.

The tendency of many women to use in the late evening/early morning brought to light the urgency of the lack of sites to obtain pipes during this time period. As one woman stated:

P08: Well I think just having a place to go to get your stuff, I think bottom line is needing more places that give out pipes. The reason I don't have a problem is because I work at VANDU and I'm here all the time, but there needs to be more places and there really needs to be somewhere to go.

Women who are involved with VANDU noted that sometimes the organization itself runs out of the \$2 pipes they sell, and this situation was seen as contributing to sharing and thereby limiting safer use:

P07: If we don't have pipes then they'll have to turn around and share with somebody else. I mean, that's what ends up happening.

Lifeskills was another frequently identified resource limited in its ability to meet the demand for equipment. The organization offers a pipe exchange such that you may turn in an old

pipe for a new one. The issue with this service, however, is that participants expressed frustration in that it is strictly an exchange:

P25: They shouldn't say that you have to exchange your pipe, they should give you a pipe for that to be harm reduction.

Women noted that an exchange is hindering to caring for the self in that there are times you break a pipe and thus you dispose of it safely in a sharps container, which renders you unable to obtain a new one via the exchange:

P24: So they have a sharps container in my hallway and my pipe broke and I thought, well, I can go in and get a new one on Monday (at Lifeskills). But I forgot that it was an exchange...So I put it in that sharps container right then and there and I lost out on a pipe because of it. And it was hysterics and I understand how people feel that don't have a pipe when they need one, the anxiety builds up, the adrenaline starts pumping.

Women also identified the need, at times, for an additional pipe which the exchange does not provide. Participants articulated that it is good practice to have an extra pipe, such that if you are in the position where if a peer really wants to share your pipe, you can simply provide them with one which adheres with safer practices and facilitates caring for the self and others:

P25: Also, you know, like I did ask for another pipe once because I told them I have a pipe and it's still good but I want another pipe in case some company comes over and that's just logical.

In addition to being able to readily access sites that provide equipment for safer crack use, participants also brought to light the importance of having staff available to answer questions or provide instruction with regards to equipment. As mentioned earlier, the value of having a staff member illustrate a certain practice, such as properly inserting a screen, was seen as a way to enhance the uptake of the particular practice and thereby supported caring for the self. There appeared to be somewhat of a mixed consensus around the use of screens, with the majority of negative feedback arising from difficulties with properly placing the screens in the

pipe. Some participants asserted that screens are, in fact, increasing in popularity as there is instruction as to how to use them properly at some sites:

P07: And a lot of people now because they're getting the proper way of doing screens they're starting...

P08: They prefer screens.

P07: Because they know they're safer and they feel better smoking with them.

There was even mention with regards to being shown to use a mouthpiece properly, with participants having asked staff at different organizations about mouthpieces, and how they are to be used. With instruction, the uptake of safer practices was much more likely. The idea of staff providing instruction to individuals around equipment, and then the subsequent instruction amongst peers, was viewed as a valuable approach to harm reduction teaching. In this instance, it is clear that supplies and formal instruction facilitate informal interactions around learning.

One last element to be discussed is the concept of a safe inhalation room for women. I broach this topic here under the category of equipment, because it generally entered discussions when women were discussing facilities and availability of equipment. The discussion of the role of a safer inhalation room is complex in facilitating women's capacities to care for themselves in that there was complete consensus around the needing a safe place for women to smoke crack, but concerns arose with regards to the design of such a place. For example, many women expressed their opposition to one large inhalation room, stating the belief that such a place would be completely "chaotic", and consequently posing a threat to the self. This stance was based on women's experiences with crack, and the fact that crack can manifest as very unpredictable behaviours amongst those who use and was thus viewed as a potential barrier to caring for the self. As expressed by one participant:

P12: I just cannot see a bunch of rock stars (people smoking crack) smoking in a room

and keeping them in their own corner without any, um, hostility happening. It's just absurd...It can't go on like hitting the pipe one after the other because I mean people get very strange. It's not like other drugs where they could hang out.

Resultantly, discussions often developed into brainstorming sessions during which participants would share ideas around a better design for a safe inhalation room with the intent to minimize chaos. Some suggestions included having small, booth-like rooms, "like a portable bathroom" as noted by one participant, in which to use. Others agreed with the concept of small rooms, but with times limits enforced to keep order and ensure everyone had an opportunity to use the room. Others put forth the idea of having one large space, but with staff present to keep behaviours and potential conflicts under control. Overall, the key notion is that women require an environment conducive to caring for the self of which safety is paramount.

Summary

The findings reveal that women's crack use patterns changed markedly over the years which reflected the age group involved in this study. Factors such as family, volunteer responsibilities, and the effects of aging all influenced changing patterns of use. The process of caring for self and others was the driving force that shaped four thematic processes. These processes represented the strategies women developed and incorporated to practice safer crack use. The categories are closely linked to one another, and consequently greatly influence how safer use unfolded. As a result, the process of safer use is not linear, and varies from individual to individual, as thematic processes of establishing a safe personal place, building trusting relationships, learning about safer crack use, and accessing harm reduction equipment were interconnected in a complex fashion to shape safer use. The relational aspect of women's safety was noted as a recurrent undertone within the thematic processes as caring for the self and others was made possible by building and maintaining relationships with the self as well as with others.

CHAPTER FIVE: DISCUSSION AND RECOMMENDATIONS

Introduction

In this chapter I discuss the contributions of this study to understanding the process of safer crack use engaged in by women who took part in the project. The primary goal of the study was to develop a theory of safer crack use by a) identifying the actions taken by women to reduce the physical, psychological, emotional and interpersonal harms associated with crack use, and b) describing the personal, social, economic, interpersonal, and political factors that influence the process of safer crack use engaged in by women. I also draw on the social, political, legal and structural elements that serve to impact women's safer crack use. Knowledge gleaned from this developing theory of safer crack use may be used by nurses and other health care professionals to facilitate women in their efforts to reduce the harms associated with crack. Furthermore, the information derived from this study can be put towards harm reduction programming and resources to foster and support safer use practices amongst women in the DTES with the ultimate goal of bettering women's health outcomes. The chapter concludes with recommendations for further research.

Summary of Key Findings

By drawing on the findings from this study I was able to develop a preliminary theory of safer crack use amongst women. Theorizing about women's crack use is essential to gain an understanding as to how women approach safer use and what factors influence safer use practices. This nascent theory has demonstrated that for women, trying to use as safely as possible is a process of caring for self and others that frames what women do in relation to smoking crack. The strategies women applied to minimize some of the harms associated with crack use were identified as establishing a safe personal place, building trusting relationships,

learning about safer crack use, and accessing harm reduction equipment. Each of these central processes reflected women's dedication to caring for the self and others and were impacted by a number of factors that served to promote and impede safer use.

First, the process of establishing a safe personal place was fundamental to women's ability to care for the self and limit the harms of crack. This place was often inside, which provided protection from the many harms in the outside environment in addition to enabling women to exert control over entry. In turn, the opportunity for violent encounters was minimized. Next, developing trusting relationships illustrated how women care for each other in the context of crack use but relationships proved to be complicated and paradoxical. While women drew on the company of trusted others to minimize violence and garner emotional support, some women refused to use with others due to previous violent encounters. Also, the compassion women felt for one another sometimes led to equipment sharing. Women, at times, would share their equipment to alleviate another's suffering, despite knowledge of the infection risk inherent in doing so. The third process, learning about safer crack use, was a fundamental modality to care for the self and others and occurred via three ways: personal experience, informal learning (interactions with friends and peers) and formal learning (education sessions, workshops). The integral nature of the relational capacity of women's safety was evident in how women facilitated each other's learning about minimizing harms in both informal and formal settings. The last process, accessing safer use equipment, was essential for women to apply the knowledge gained about minimizing the harms of crack. Without the equipment to practice safer crack use, efforts to minimize harms were markedly limited. Unfortunately, it was clear that at present despite women's knowledge and efforts to use crack more safely, sites cannot keep up with the demand for equipment to facilitate safer use.

The key when thinking about the processes women apply to engage in safer use is recognizing that safer practices are incumbent on not only one process, but the integration of all four processes to promote and sustain caring for the self and others. Furthermore, these processes women applied to practice safer crack use were influenced by larger contextual factors such as violence, poverty, and lack of affordable housing. Consequently, to effectively promote safer use amongst women not only are the identified processes essential to caring for the self and others, but the greater contextual factors that impact the processes must be taken into consideration.

Before embarking on the discussion, the overrepresentation of Aboriginal women was an unexpected finding that must be reiterated. The fact that the majority of participants were of Aboriginal descent indicates the effects of colonization continue to tremendously impact Aboriginal women to this day. Because this was not a study of Aboriginal women and crack use, exploring the safer crack use practices of this specific group was beyond the scope of the investigation. However, gaining an understanding of the challenges continually faced by Aboriginal women residing in the DTES is imperative along with developing an understanding as to the unique harm reduction needs of this particular group. Future research must be guided by questions that examine what harm reduction services are currently being accessed by Aboriginal women, what aspects of these services are found to be beneficial and why. Furthermore, research into the factors that influence safer crack use practices of Aboriginal women residing in the DTES is essential to develop programming and services that are culturally sensitive (Culhane, 2004; Browne & Varcoe, 2006; Varcoe & Dick, 2008).

Discussion

The findings of this study reveal how women go about minimizing the harms of crack cocaine in the broad context of their everyday lives. This was a novel research focus as much of

what is known about women's efforts and strategies to reduce the harms of crack has been situated within the specific contexts of harm reduction programming (Boyd, Johnson & Moffat, 2008; Bungay, Johnson, Boyd, Malchy, Buxton, Loudfoot, 2009; Malchy, Bungay & Johnson; SCORE Project, 2007) or pregnancy (Kearney, Murphy, Irwin & Rosenbaum, 1995; Murphy & Rosenbaum, 1999). This nascent theory that was derived from the data provides three major contributions to what is presently known about how women engage in safer crack use.

To start, this theory reinforces the growing movement that emphasizes women have an awareness of the harms associated with crack and are actively involved in managing their health by taking steps to minimize these harms (Boyd, Johnson & Moffat, 2008; Bungay, Johnson, Boyd, Malchy, Buxton, Loudfoot, 2009; Malchy, Bungay & Johnson; SCORE Project, 2007). The emphasis of this theory is positive in that it accentuates women's agency and capacity to take control of their health and facilitate others in doing the same. Much of the literature to date with regards to drug use practices has focused on the negatives, illustrating the harmful impact of concepts such as the risk environment on safer use (e.g., Latkin, Williams, Wang & Curry, 2005; Maas, Fairbairn, Kerr, Li, Montaner & Wood, 2007 Rhodes, Singer, Bourgois, Friedman, and Strathdee, 2005). Conversely, the findings here complement work that has focused on the positives amidst drug use such as the impact of "enabling environments" and their role in reducing drug related harms and facilitating healthy growth and development (e.g., Duff, 2006). Women's capacities contribute to such an enabling environment by actively supporting each other in minimizing drug related harms. Women demonstrate a proficiency in managing their own health and the health of others, but what truly limits this capacity is resource insufficiency. It is troubling to recognize that women possess the knowledge and will to reduce crack-related harms, but that they are not supported in their efforts as the resources necessary for health and

well-being are severely limited. The literature has illustrated the critical role of resources in reducing drug-related harms (City of Ottawa Safer Crack Use Initiative Evaluation Report, 2006; Leonard, DeRubeis, Pelude, Medd, Birkett & Seto, 2007; Ontario Needle Exchange Programs Best Practice Recommendations, 2006) yet a dearth of resources for women who use crack remains. In the absence of the necessary equipment and resources to practice safer use, women's knowledge and formidable capacity to manage health in the context of drug use cannot be fully realized.

The second major contribution of this theory is the notion that safer use cannot be conceptualized as an individual endeavour. Conversely, women's safer crack use practices are bound to their relationships and their propensity to care for the health and well-being of others. The literature has illustrated the power of women's relationships as a source of support in the context of harm reduction programming (Bungay, Johnson, Boyd, Malchy, Buxton, Loudfoot, 2009; Bungay, Varcoe, Johnson & Boyd, 2010; SCORE Project, 2007) in addition to the power of community-based grassroots approaches to harm reduction services (Duff, 2006; SCORE Project). This theory, however, elucidates that the very practice of safer use is embedded within relationships. These relationships embody caring and compassion for both the self and others and translate into safer use practices, but are also complex and paradoxical. On one hand, relationships greatly facilitate safer use in that much of women's knowledge pertaining to the harms of crack and subsequent safer use practices was gained from other women. The trusting relationships women built with one another also served as protection in the context of use. For example, women often adopted non-sharing principles with regards to their pipes due to concern over potentially exposing another woman to infection. However, a paradoxical situation is present in that women will share their pipe with another woman out of compassion. Women

empathize with each other, and seek to alleviate the suffering witnessed in another who is in need of crack and unable to obtain it. Relationships, consequently, dictate much of how women engage in safer use practices and play a vital role in understanding how women's safer use unfolds.

The third contribution of this theory is that it demonstrates how women's safer use practices are not only bound to interpersonal relationships, but also relationships with larger social structures including the spatial environment, politics and economics whose impact on safer use practices has been highlighted in the literature (Bungay, Varcoe, Johnson & Boyd, 2010; Duff, 2006; Rhodes, Singer, Bourgois, Friedman & Strathdee, 2007). This study illustrated that women identified the spatial environment of the DTES as a barrier to safer use due to experiences with violence in the context of crack use. The overarching emphasis was that women needed to feel safe when using crack, and thus a place where they were free of worry pertaining to violence was fundamental. Violence presents a major threat to overall health and well-being (Bungay et al, 2010; Butters & Erickson, 2003; Varcoe & Dick, 2008) and women consequently altered their use practices to minimize this threat by using indoors, most often in one's own home. This gave women the opportunity to exercise control over their health and well-being by using in a place removed from the violence of the alleyways and street corners and identified housing as a critical component to women's safer use. Although only two out of the 27 women that participated in the study did not have housing, the stability of affordable housing in the DTES is dissipating (Robertson & Culhane, 2005) which has great implications for women's safer use practices given the above information. The movement away from cultivating supportive housing reflects the impact of political decisions that do not favour development of affordable housing, and have a direct impact on the health of women who reside in the DTES who smoke

crack. With the political system neglecting to promote development of affordable housing options, women are faced with limited availability of safe spaces within which to use safely in the absence of violence.

Most women residing in the DTES live with extreme economic constraints (Bungay, 2008; Bungay, Johnson, Varcoe & Boyd, 2010) and poverty has been identified as a determinant of health (Bryant, Raphael & Rioux, 2006). All women who participated in this study were receiving income assistance, which means each woman received \$658.00/month (British Columbia Ministry of Social Development, 2008), an indisputably limited amount of money to cover all living expenses. Economic constraint contributes to safer crack use practices in that women rely on the availability of equipment to practice safer crack use. However, with limited finances, purchasing safer equipment (which is often sold at inflated prices) is simply not an option. Thus, due to fiscal limitation coupled with equipment insufficiency, women in the DTES often do not have the means to access both crack and the equipment necessary for safer use (pipes, mouthpieces). This situation contributes to sharing as many women will opt for crack, and in the absence of a pipe consequently share with someone else. Because women have great compassion for one another and are unable to obtain both crack and a pipe, sharing often occurs out of empathy for one another's needs. Furthermore many women in the DTES become involved with the sex industry out of economic necessity (Bungay, 2008; Bungay, Johnson, Boyd, Malchy, Buxton, Loudfoot, 2009; Bungay, Johnson, Varcoe & Boyd, 2010; SCORE Project, 2007), which has been demonstrated to present additional harms such as violence, social stigma, and the expectation to supply others, namely men, with crack (SCORE Project).

Recommendations

Building on Women's Proficiency and Increasing Equipment Availability.

This study highlighted women's proficiency in managing their health by actively engaging in strategies to minimize the harms associated with crack cocaine. However, a major barrier to their efforts is the lack of equipment, and thus the issue of equipment availability must be addressed. Despite the efforts of local agencies including VANDU, Lifeskills, WISH, SWUAV, PACE and VIDUS, the demand for supplies (most notably pipes) exceeds the capability of the resources to provide for all in need. The availability of equipment has been exemplified as one of the single most instrumental factors in the reduction of sharing practices, and consequently, the risk of spread of infections (Boyd, Johnson & Moffat, 2008; City of Ottawa Public Health Safer Crack Use Initiative, 2006; Ontario Needle Exchange Programs Best Practice Recommendations, 2006; SCORE Project, 2007). An awareness of the fact that crack use is continually rising in the DTES specifically with regards to women necessitates an emphasis on ensuring accessibility and availability of equipment. As noted in this study, the late evening and early morning hours are particularly difficult times to obtain equipment, highlighting the need for facilities to be open at that time. Increasing availability of pipes is necessary as women are left with few choices other than to buy from people selling pipes on the streets at increased prices.

Research has noted that services such as "pipe depots" where old pipes can be exchanged for new ones are in fact an obsolete approach to increasing the accessibility of pipes (City of Ottawa Public Health Safer Crack Use Initiative, 2006). Findings here concurred, with frustration expressed regarding the limitations of the pipe exchange currently in operation in the DTES. To increase accessibility of equipment, the site must be open 24 hours, and provide pipes

rather than operating as an exchange. As stated earlier in this thesis, the local health authority is reportedly increasing the supply of pipes to facilitate safer crack use in the DTES but the logistics as to how the pipes will be distributed remains unknown. Outreach services, such as mobile vans that deliver safer crack supplies, in particular, safer crack kits, are a valuable service and should be supported.

The literature supports the use of outreach services as an effective and viable means of reaching individuals at risk (Ontario Needle Exchange Best Practice Recommendations, 2006; SCORE Project, 2007). The findings indicated a growing need for services such as mobile equipment dispensing. The use of outreach vans is helpful to accessing greater numbers of women, especially those with mobility issues, and many within the demographic that took part in this study had musculoskeletal complications and ailments such as osteoarthritis and rheumatoid arthritis. For these women, having an outreach option for equipment was seen as crucial but not currently an option. As suggested in the SCORE Project (2007), having kits and pipes available at a variety of agencies in the DTES in combination with outreach was emphasized as an effective means to distribution of equipment. However, little development in this vein has occurred in the DTES despite the overwhelming demand.

Women Centred Services.

This study elucidated the centrality of women's relationships to reducing the harms associated with crack use by emphasizing the inherent capacities of women to care for themselves and others. The strategies women applied, identified as the four thematic processes, were contingent upon building and maintaining relationships with others as well as with organizations and resources. This capacity to care has great implications for resources as programming should be developed on the basis of women's relationships and the support they

provide one another in the context of safer use. Duff (2009) emphasizes that effective harm reduction relies on the adoption of specific relations of care and reciprocity between individuals and groups within particular drug use settings. In doing so, a "culture of care" is created, which enhances resiliency amongst individuals in addition to reducing the experience of harm (Duff). The idea of a culture of care is supported by Bungay, Johnson, Boyd, Malchy, Buxton & Loudfoot (2009) who stated the importance of building a community of women in harm reduction initiatives as women felt strengthened by a sense of belonging. To build a community of women, it is necessary to apply a women's-centred approach to programming that places an emphasis on building women's relationships in a caring and supportive environment. A safe environment is also essential for programming to be women's-centred as women would not share experiences and information freely with each other in the absence of feeling safe and at ease (Bungay et al, 2009). Furthermore, by providing a safe environment for women to socialize and get to know one another, relationships were developed that could serve as a resource when women were outside the context of the group (Bungay et al).

Women's interactions with friends and peers were a key source of knowledge about limiting some of the harms associated with crack. Consequently, safer crack use was conceptualized as unfolding in the context of everyday use amongst peers and friends, as well as within established harm reduction workshops and programs. The value of informal learning to safer use practices has been well established in the literature, and has informed many of the harm reduction initiatives in the DTES (Bungay, Johnson, Boyd, Malchy, Buxton, Loudfoot, 2009; SCORE Project, 2007). Understanding that women learn about safer use on a day-to-day basis in the context of their relationships emphasizes the value of developing reduction programs based on the contributions of women. Harm reduction requires a grassroots approach as women living

in the DTES demonstrated that they can and do provide harm reduction education to each other (Bungay et al).

Grassroots initiatives should involve women's-centred initiatives that encourage the sharing of stories, experiences and opinions, as storytelling was demonstrated as a powerful means to providing education (Bungay, Johnson, Boyd, Malchy, Buxton & Loudfoot, 2009). Initiatives that focus on the knowledge contributions of people serve to facilitate empowerment and confidence building (Duff, 2006). Programming also benefits from the contributions of peer facilitators who encourage mentoring and support their peers in developing skills that may aid others in becoming leaders of future grassroots harm reduction initiatives (Bungay et al, 2009). Furthermore, peer education extends beyond the group setting into everyday interactions through women's networking in the DTES, where it has the potential to impact a tremendous number of women.

The participants in this study emphasized the need for more harm reduction groups for women, as programs currently in operation such as the VANDU Women's Group were viewed as valuable and helpful resources. However, the demand for such service is growing in the absence of additional development. There was concern that the emphasis of harm reduction efforts remains on injection drug use, an observation noted by Bungay, Johnson, Varcoe & Boyd (2010). Participants identified groups that offer support and education as essential for women in the community who grapple with challenges including violence and limited finances on a daily basis. Harm reduction programming provided women not only with valuable knowledge with regards to practicing safer crack use, but a place to simply be, socialize with others, and feel safe (Bungay, Johnson, Boyd, Malchy, Buxton & Loudfoot, 2009). Many women who took part in the study were active members of supportive resources for women and expressed the need to

keep harm reduction for crack at the forefront as crack use is increasing in the neighbourhood (DeBeck, Kerr, Li, Fischer, Buxton, Montaner, 2009). It was emphasized that resources are essential especially for the constant influx of younger women entering the neighbourhood, many who are using crack and may not be aware of safer use practices.

The Importance of Place.

Due to the everyday violence experienced by women residing in the DTES, safe, personal places are necessary to maintain women's safety while engaging in crack use. The literature has emphasized the prevalence of violence in the lives of women who use crack, and the necessity for women to access safe places within which they may engage in crack use (Bungay, Johnson, Boyd, Malchy, Buxton & Loudfoot, 2009; Bungay, Johnson, Varcoe, Boyd, 2010). The everpresent and unpredictable nature of violence in the lives of women residing in the DTES creates a considerable barrier to safer use practices and necessitates the availability of safe, legal places for women. To establish such safe places, a major shift must first occur within social programming to uphold the principle of equity and develop more affordable housing within the DTES. Affordable housing is becoming scarce as the process of gentrification in the DTES intensifies (Bungay et al, 2009). The impact of stable housing is greatly linked to health outcomes, as it is identified as one of the major health indicators (Bryant, Raphael, & Rioux, 2006). Social and political agendas must re-evaluate the importance of subsidized housing in the health and well-being of individuals and adjust developments in the DTES accordingly.

In addition, resources must take into consideration the importance of a safe place amidst programs. As exemplified by Bungay, Johnson, Boyd, Malchy, Buxton & Loudfoot (2009) the necessity of a safe place in the context of harm reduction programming in their work highlights the need for an environment within which women can be free of worry regarding potential

threats of violence. Research, however, has brought to light the troubling fact that integrating safe spaces for women within harm reduction programming has become increasingly difficult due to Provincial and Federal cuts to services, welfare support, public housing and community-based programs resulting in the loss of safe spaces for women (Creese & Strong-Boag, 2005).

The dearth of safe spaces along with the need for such indoor spaces within which women may use crack has been articulated by other researchers (Boyd, Johnson & Moffat, 2008; Bungay, Johnson, Boyd, Malchy, Buxton & Loudfoot, 2009; SCORE project, 2007). The idea of a drug consumption room for inhalation such as those currently in operation in Europe (Hendrich, 2004; Wolf, Linseen & Graaf, 2003) is a notion that requires further investigation as determining what a safe inhalation space would look like is complex. There was a lack of support for a single room inhalation site as this was viewed as a threat to personal safety. However, despite concerns over the particulars of such a facility, it is undeniable that a safe place is fundamental to women's safer crack use. Pilot studies would serve as an effective means to investigate the feasibility of small, individual cubicles and allow for the application of stipulations such as ground rules, including time limits, to avoid lines and long waits. Eliciting women's opinions on what a safe place to smoke crack should look like is necessary to best meet the needs of women with regards to a safe smoking site. Regardless of the design, the establishment of a safe, legal place for women to use crack will require the support of local government. The emphasis remains on injection drug use (Boyd, Johnson & Moffat, 2008; Bungay, Johnson, Boyd, Malchy, Buxton & Loudfoot, 2009) despite the evidence of increased rates of crack use especially amongst women in impoverished neighbourhoods (CHASE Project Team, 2005; Lejuez, Bornovalova, Reynolds & Daughters, 2007).

Conclusion

Although this was a small study limited to a particular age group of women in the DTES, there are several insights gained from this research. The women who took part in this study who live in a neighbourhood plagued by numerous challenges including violence and poverty contribute to the ongoing development of a supportive community of women. Any harm reduction initiatives developed for women in the DTES must first take this crucial finding into consideration, and thereby build upon women's efforts in cultivating strong, supportive networks. Developing programming based on women's expertise, experience, and contribution, the grassroots approach to harm reduction initiatives, will result in meaningful, effective services for women.

It is troubling, and puzzling, that despite the overwhelming demand for harm reduction programming and equipment for women who use crack the emphasis in the DTES remains on injection drug use. My intent is not to discount the importance of harm reduction services for injection drug use, but the need for additional programming and resources that increase equipment availability for safer use crack use practices are greatly needed in the neighbourhood. The major issue is the lack of available pipes, and to truly improve the health outcomes of women who live in the DTES and use crack, a vested dedication to developing women's-centred programming and distribution of equipment, most notably pipes, is necessary.

This study has a number of limitations. Firstly, it is a small study limited to a particular sample of women residing in a neighbourhood in one Canadian city. It is not possible, nor was it intended, for the results to be generalized to other groups in other settings. Rather, the idea was to take the information to inform initiatives geared for women who use crack cocaine within this particular neighbourhood. Secondly, there is a sample bias evident in that VANDU is not a youth

based service and thus the sample represented a population of older, high functioning women. The findings reported here do not speak to the needs of younger women who use crack and reside in the DTES, research that is necessary to understand the needs of this age group. Furthermore, this was not a study on Aboriginal women and crack use; however, the overwhelming majority of Aboriginal participants necessitate research into the harm reduction needs of Aboriginal women to develop culturally sensitive services.

Additional research must also further explore women's perspectives around a safe inhalation site. The need for a safe place to smoke was a prominent motif in this research, but there remained considerable disagreement around the design of a safe smoking room. Research is also needed in terms of evaluating current harm reduction programming in existence for women in the DTES. This study has shed light on what women are doing to stay safer, and what they feel is necessary to promote safer use. However, there has been little research to date that has evaluated current harm reduction initiatives for women and crack cocaine use.

References

- Alexander, A. (2006). Beyond Vancouver's "Four Pillars": an historical analysis. *International Journal of Drug Policy*, 17(2), 118-123. doi:10.16/j.drugpo.2005.12.009.
- Back, S., Brady, K., Jackson, J., Salstrom, S., & Zinzow, H. (2005). Gender differences in stress reactivity among cocainedependent individuals. *Psychopharmacology*, *180*, 169–176. doi: 10.1007/s00213-004-2129-7
- Barnett, R. (2000). *A Framework for Women-centred Health*. Vancouver, Canada: Vancouver/Richmond Health Board.
- Beck, C.T. (1996). Grounded theory: Overview and application in pediatric nursing. *Issues in Comprehensive Pediatric Nursing*, 19, 1-5.
- Benoit, C., Carroll, D., Chaudhry, M. (2003). In search of a healing place: Aboriginal Women In Vancouver's Downtown Eastside. *Social Science and Medicine*, *56*(6), 821-833. doi: 10. 1016/S0277-9536(02)00081-3.
- Bluthenthal, R.N., Lorvick, J., Kral, A., Erringer, E., & Kahn, J. (1999). Collateral damage in the war on drugs: HIV risk behaviours among injection drug users. *International Journal of Drug Policy*, *10*(1), 25-38. doi: 10. 1016/S0955-3959(98)00076-0.
- Boyd, S.C., Johnson, J.L, & Moffat, B. (2008). Opportunities to learn and barriers to change: crack cocaine use in the Downtown Eastside of Vancouver. *Harm Reduction Journal*, *5*, 1-36. doi: 10.1186/1477-7517-5-34.
- British Columbia Harm Reduction Strategies and Services. (2008). Best Practices for British Columbia's Harm Reduction Supply Distribution Program September 2008.
- British Columbia Harm Reduction Strategies and Services. (2011). *Harm Reduction Training Manual January 2011*.

- British Columbia Ministry of Social Development (2008). *Income Assistance Rate Changes*.

 Retrieved from: http://www.hsd.gov.bc.ca/factsheets/2007/increase.htm.
- Brown, C., Stewarts, S., Larsen, S. (2005). Experiences of harm reduction among women with alcohol abuse problems. *Canadian Journal of Community Mental Health*, *24* (1), 95-113. Retrieved from: http://www.metapress.com/content/53w75wh044127xt3/fulltext.pdf.
- Browne, A.J. & Varcoe, C. (2006). Critical cultural perspectives and health care involving Aboriginal peoples. *Indigenous Health Care*, 22 (2), 155-167. doi: 10.5172/conu.2006.22.2.155.
- Bryant, T., Raphael, D. & Rioux, M. (2006). Staying Alive: Critical Perspectives on Health, Illness, and Health Care. Toronto: Canadian Scholars Press, Inc.
- Bungay. (2008). Health experiences of women who are street involved and use crack cocaine: inequity, oppression and relations of power in Vancouver's Downtown

 Eastside. (Doctoral dissertation). University of British Columbia, Vancouver.
- Bungay, V., Johnson, J.L., Boyd, S.C, Malchy, L., Buxton, J. & Loudfoot, J. (2009). Women's Stories/women's lives: Creating safer crack kits. *Women's Health and Urban Life, 8,* 28-41. Retrieved from:
 - https://tspace.library.utoronto.ca/bitstream/1807/17394/1/bungay_johnson_etal.pdf.
- Bungay, V., Johnson, J.L., Varcoe, C. & Boyd, S. (2010). Women's health and use of crack cocaine in context: Structural and "everyday" violence. *International Journal of Drug Policy*, 21(4), 321-329. doi: 10.1016/j.drugpo.2009.12.008.
- Butters, J. & Erickson, P.G. (2003). Meeting the health care needs of female crack cocaine users:

 A Canadian Example. *Women & Health*, *37*(3), 1-17. doi: 10.1300/J013v37n03_01
- Buxton, J.A., Preston, E.C., Mak, S. Harvard, S. & Barley, J. (2008). More than just needles: An

- Evidence-informed approach to enhancing harm reduction supply distribution in British Columbia. *Harm Reduction Journal*, *5*(37), 1-7. doi:10.1186/1477-7517-5-37.
- Buxton, J. (2007) Vancouver Drug Use Epidemiology, Vancouver Site Report for the Canadian

 Community Epidemiology Network on Drug Use. [CCENDU] June 2007.

 [http://vancouver.ca/fourpillars/documents/Full CCENDU report 2007 web.pdf]
- Canadian Nurses Association. (2008). *Code of Ethics for Registered Nurses*. Retrieved June 24, 2010 from: http://www.cna- nurses.ca/CNA/documents/pdf/publications/Code_of_

 Ethics 2008 e.pdf.
- Carriere, G. (2008). Linking women to health and wellness: street outreach takes a population health approach. *International Journal of Drug Policy*, *19*, 205-210 doi: 10.1016/j.drugpo.2008.03.006.
- Charmaz, K. (2006). Constructing Grounded Theory: A Practical Guide Through

 Qualitative Analysis. London: Sage Publications.
- CHASE Project Team (2005). Community health and safety evaluation (CHASE) project: Final Report Vancouver, BC: BC Centre for Excellence in HIV/AIDS and Providence Health Care.
- City of Vancouver (2001): A Framework for Action: A Four-Pillar Approach to Drug Policy in Vancouver. Retrieved from: http://www.vancouver.ca/fourpillars.
- City of Vancouver (2004): *Downtown Eastside Community Monitoring Report (Rep. No. 9th Edition)* Vancouver: Central Area Planning Department; 2004.
- Corbin, J., & Strauss, A. (1998). *Basics of Qualitative Research*. Thousand Oaks: Sage Publications.
- Creese, G. & Strong-Boag, V. (2005). Losing ground: The effects of government cutbacks on

- Women in British Columbia, 2001-2005. Retrieved from: http://web.uvic.ca/spp/documents/losingground.pdf.
- Crotty, M. (1998). *The Foundations of Social Research: Meaning and Perspective in the Research Process.* London: Sage Publications.
- Culhane, D. (2003). Their spirits live within us Aboriginal women in the Downtown Eastside

 Vancouver emerging into visibility. *The American Indian Quarterly*, 27(3&4), 593-606.

 doi: 10.1353/aiq.2004.0073.
- Cutcliffe, J.R. (2000). Metholdological issues in grounded theory. *Journal of Advanced Nursing*, *31*(6), 1476-1484. doi: 10.1046/j.1365-2648.2000.01430.x.
- Dawe, S., Gerada, C. & Strange, J. (1992). Establishment of a liaison service for pregnant opiate-Dependent women. *British Journal of Addiction*, 87, 67-871. doi: 10.1111/j.1360-0443.1992.tb01981.x.
- DeBeck, K., Kerr, T., Li, K., Fischer, B., Buxton, J., Montaner, J., et al (2009). Smoking crack cocaine as a risk factor for HIV infection among people who use injection drugs. *Canadian Medical Association Journal*, 181, 572-585. doi: 10.1503/cmaj.082054.
- Duff, Cameron (2009). The drifting city: the role of affect and repair in the development of "enabling environments". *International Journal of Drug Policy*, 20(3), 202-208 doi: 10.1016/j.drugpo.2008.08.002.
- Erickson, P.G., Butters, J., McGillicuddy, P. & Hallgren, A. (2000). Crack and prostitution: gender, myths, and experiences. *Journal of Drug Issues*, *30*(4), 767-788

 Retrieved from: http://web.ebscohost.com/ehost/pdfviewer/pdfviewer/sid=94f74d12-54a3-4c0e-bbcc-1c0bb80131a8%40sessionmgr14&vid=2&hid=13.
- Erickson, P.G., Riley, D.M., Cheung, Y.W. & O'Hare, P.A. (1997). Harm Reduction: A New

- Direction for Drug Policies and Programs. Toronto: University of Toronto Press.
- Ettore, E. (2004). Revisioning women and drug use: gender sensitivity, embodiment and Reducing harm. *International Journal of Drug Policy*, *15*, 327-335 doi: 10.1016/j.drugpo.2004.06.009.
- Falk, R., Wang, J., Siegal, H. & Carlson, R. (2003). Current physical health problems and their predictors among a community sample of crack-cocaine smokers in Ohio. *Journal of Psychoactive Drugs*, 35, 471-478.
- Flavin, J. (2002). A glass half full? Harm reduction among pregnant women who use cocaine. *Journal of Drug Issues*, *32*(3), 973-978. Retrieved from:

 http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=7511909&site=src-live.
- Frohlich, K. & Potvin, L. (2008). The inequality paradox: the population approach and vulnerable populations. *American Journal of Public Health*, *98*(2), 1-6. doi: 10.2105/AJPH.2007.1114777
- Frohlich, K.L., Ross, N., & Richmond, C. (2006). Health disparities in Canada today: Some Evidence and a theoretical framework. *Health Policy*, *79*, 132-143. doi: 10.1016/j.healthpol.2005.12.010.
- Fischer, B., Powis, J., Cruz, M.F., Rudzinski, K., & Rehm, J. (2008). Hepatitis C virus

 Transmission among oral crack users: Viral detection on crack paraphernalia. *European Journal of Gastroenterology & Hepatology, 20,* 29-32. Retrieved from:

 http://www.ohrdp.ca/wp-content/uploads/pdf/Fischer2007.pdf.
- Glaser, B.G. (1992). *Basics of Grounded Theory Analysis*. Mill Valley, CA: The Sociology Press.

- Guba, E.B., & Lincoln, F.S. Effective Evaluation. San Francisco, Jossey-Bass, 1981.
- Hall, W. A. & Cullery, P. (2001). Enhancing the rigor of grounded theory: incorporating reflexivity and relationality. *Qualitative Health Research*, 11(2), 257-272 doi: 10.1177/104973201129119082.
- Haydon, E. & Fischer, B. (2005). Crack use as a public health problem in Canada. *Canadian Journal of Public Health*, *96*(3), 185-188. Retrieved from: http://pubs.cpha.ca/PDF/P26/22306.pdf.
- Health Canada (2009). *Canada Health Act Annual Report 2008-2009*. Retrieved June 24, 2010 From: http://www.hc-sc.gc.ca/hcs-sss/pubs/cha-lcs/2009-cha-lcs-ar-ra/index-eng.php#chap1.
- Hilton, B.A., Thompson, R., Moore-Dempsey, L., Janzen, R.G. (2000). Harm reduction theories and strategies for control of human immunodeficiency virus: a review of the literature.

 **Journal of Advanced Nursing, 33 (3), 357-370. doi: 10.1046/j.1365-2648.2001.01672.x.
- Indian and Northern Affairs Canada (2002). *Words First:An Evolving Terminology Relating to Aboriginal Peoples in Canada*. Ottawa: Government of Canada, 2002. Retrieved February 24, 2011 from: http://dsp-psd.pwgsc.gc.ca/Collection/R2-236-2002E.pdf.
- Johnson, J., Malchy, L., Mulvogue, T., Moffat, B., Boyd, S., Buxton, J. et al. (2008). Lessons

 Learned from the Score Project: A document to support outreach and education related to safer crack use. Vancouver, BC: Nursing and Health Behaviour Research

 Unit/NEXUS, University of British Columbia.
- Kearney, M.H., Murphy, S., & Rosenbaum, M. (1994). Mothering on crack cocaine: a grounded theory analysis. *Social Science and Medicine*, *38* (2), 351-361. doi: 10.1016/0277-9536(94)90405-7.

- Kearney, M.H., Murphy, S., Irwin, K. & Rosenbaum, M. (1995). Salvaging self: A grounded Theory of pregnancy on crack cocaine. *Nursing Research*, *44*(4), 208-213. Retrieved from: http://ovidsp.tx.ovid.com/sp-3.3.1a/ovidweb.cgi.
- Kerr, T. & Wood, E. (2006). What do you do when you hit rock bottom? Responding to drugs In the city of Vancouver. *International Journal of Drug Policy*, 17(2), 55-60. doi:10.1016/j.drugpo.2005.12.007.
- Kitzinger, J. (1995). Qualitative research: introducing focus groups. *British Medical Journal*, 311, 299-302. Accessed November 22, 2010 from: http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?hid=107&sid=0d4541e1-5b0d-4ee7-b204-07d661a4144d%40sessionmgr113&vid=2.
- Latkin, C.A., Williams, C., Wang, J., and Curry, A.D. (2005). Neighborhood social disorder as a determinant of drug injection behaviors: A structural equation modeling approach. *Health Psychology* 24, 96–100. doi: 10.1037/0278-6144.24.1.96.
- Lejuez, C.W., Bornovalova, M.A., Reynolds, E.K., & Daughters, S. (2007). Risk factors in the relationship between gender and crack/cocaine. *Experimental and Clinical Psychopharmacology*, *15*, 165-175. doi: 10.1037/1064-1297.15.2.165.
- Leonard, L. DeRubeis, E., Birkett, N. (2006). City of Ottawa Public Health Safer Crack Use

 Initiative Evaluation Report October 2006.
- Leonard, L., DeRubeis, E., Pelude, L., Medd, E., Birkett, N. & Seto, J. (2007). "I inject less as I have easier access to pipes" Injecting, and sharing of crack-smoking materials, decline as safer crack-smoking resources are distributed. *International Journal of Drug Policy*, 19 (3), 255-264. doi: 10.1016/j.drugpo.2007.02.008.
- 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. doi: 10.1016/j.drugpo.2008.02.015.
- Livingstone, D. (1999). Exploring the icebergs of adult learning: Findings of the first Canadian survey of informal learning practices. CJSAE 13 (2), 49-72. Retrieved from: https://tspace.library.utoronto.ca/bitstream/1807/2724/2/10exploring.pdf.
- MacPherson, D., Mulla, Z. & Richardson, L. (2006). The evolution of drug policy in
 Vancouver, Canada; Strategies for preventing harm from psychoactive substance
 use. *International Journal of Drug Policy*, 17, 127-132. doi:
 0.1016/j.drugpo.2005/10.006.
- Macrory, F. & Boyd, S.C. (2007). Developing primary and secondary services for drug and Alcohol dependent mothers. *Seminars in Fetal and Neonatal Medicine, 12*, 119-126. doi: 10.1016/j.siny.2007.01.005.
- Maas, B., Fairbairn, N., Kerr, T. Li, K., Montaner J.S.G. and Wood, E. (2007). Neighborhood and HIV infection among IDU: Place of residence independently predicts HIV infection among a cohort of injection drug users. *Health & Place*, 13, 432–439. doi: 10.1016/j.healthplace.2006.05.005.
- Malchy, L., Bungay, V. & Johnson, J.L. (2008). Documenting practices and perceptions of "safer" crack use: A Canadian pilot study. *International Journal of Drug Policy*, *19*, 339-341. doi: 10.1016/j.drugpo.2007.06.005.
- Marlatt, G.A. (1996). Harm Reduction: Come as you are. *Addictive Behaviours*, *21*(6), 779-778. Retrieved from: doi: 10.1016/0306-4603(96)00042-1.
- Mead, G. H. (1934). *Mind, Self and Society from the Standpoint of a Social Behaviourist*.

 University of Chicago: Chicago.

- Metsch, L.R., McCoy, H.V., McCoy, C.B., Miles, C.C., Edlin, B.R. & Pereyra, M. (1999). Use Of health care services by women who use crack cocaine. *Women & Health*, *30*, 35-51 doi: 10.1300/J013v30n01_03.
- Patton, M.Q. (1990). Qualitative Evaluation and Research Methods. (2nd Edition). Sage: London.
- Rehman, L., Gahagan, J., DiCenso, A., & Dias, G (2005). Harm reduction and women in the Canadian National Prison System: policy or practice? *Women & Health*, 40(4), 57-73 doi: 10.1300/J013v40n04 04.
- Rhodes, T., Singer, M., Bourgois, P., Friedman, S.R. and Strathdee, S.A. (2005). The social Structure production of HIV risk among injection drug users. *Social Science and Medicine 61*(5), 1026-1044. doi: 10.1016/j.socscimed.2004.12.024.
- Roberston, L. Culhane, D. (Eds.). (2005). *In Plain Sight: Reflections on Life in Downtown Eastside Vancouver*. Edited by: Robertson, L., Culhane, D. Vancouver: Talon Books.
- Sandelowski, R. (1986). The problem of rigor in qualitative research. *Advances in Nursing Science*, 8(3), 27-37. Retrieved from: http://ovidsp.tx.ovid.com/.
- Shannon, K., Ishida, T., Morgan, R., Bear, A., Oleson, M., Kerr, T., & Tyndall, M.W. (2006).

 Potential Community and public health impacts of medically supervised safer smoking facilities for crack cocaine users. *Harm Reduction Journal*, *10*(3), 1-8 doi:10.1186/1477-7517-3-1.
- Shannon, K., Rusch, M. Morgan, M., Oleson, M., Kerr, T., & Tyndall, M. W. (2008).
 HIV and HCV prevalence and gender-specific risk profiles of crack cocaine users and dual users of injection drugs. Substance Use and Misuse, 43, 1-4
 doi:10.1080/10826080701772355.
- Shannon, K., Rusch, M., Shoveller, J., Alexson, D., Gibson, K. & Tyndall, M. (2008). Mapping

- violence and policing as an environmental-structural barrier to health service and syringe availability among substance-using women in street-level sex work. *International Journal of Drug Policy*, *19*, 140-147. doi: 10.1016/j.drugpo.2007.11.024.
- Shields, L. & Lindsey, E. (1998). Community health promotion nursing practice. *Advances in Nursing Science*, 20(4), 23-36. Retrieved from: http://ovidsp.tx.ovid.com/sp-3.3.1a/ovidweb.cgi.
- Small, W., Kerr, T., Charette, J., Schechter, M.T. & Spittal, P.M. (2006). Impacts on intensified police activity on injection drug users: Evidence from n ethnographic investigation. *International Journal of Drug Policy*, 17(2), 85-95.
- Story, A., Bothamley, G., Hayward, A. (2008). Crack cocaine and infectious tuberculosis. *Emerging Infectious Diseases*, 14(9), 1466-1469. doi: 10.3201/eid1409.070654.
- Strike, C., Leonard, L., Millson, M., Anstice, S., Berkeley, N. & Medd, E (2006). *Best Practice Recommendations. Toronto: Ontario Needle Exchange Coordinating Committee 2006.*
- Tatarsky, A. (1998). An integrative approach to harm reduction psychotherapy: A case of problem drinking secondary to depression. *In Session: Psychotherapy in Practice*, *4*(1), 9-24. doi: 10.1002/(SICI)1520-6572(199821)4:1<9::AID-SESS2>3.0.CO;2-I.
- Tempalski, B & McQuie, H. (2009). Drugscapes and the role of place and space in injection drug use-related HIV risk environment. *International Journal of Drug Policy*, 20 (1), 4-13. doi: 10.1016/j.drugpo.2008.02.002.
- Thorne, S (2008). Interpretive Description. Walnut Creek, CA: Left Coast Press.
- Tolich, M. (2009). The principle of caveat emptor: Confidentiality and informed consent as Endemic dilemmas in focus group research. *Bioethical Inquiry*, *6*, 99-108. doi: 10.1007/s11673-008-9124-3

- University of British Columbia Department of Health, Safety and Environment (2010).

 **H1N1 Flu Virus (Human Swine Flu). Retrieved from:

 http://www.hse.ubc.ca/health/community-health/h1n1-flu-virus-human-swine-flu
- Varcoe, V. & Dick, S. (2008). The intersecting risks of violence and HIV for Aboriginal

 Women in a neo-colonial Canadian context. *Journal of Aboriginal Health*, 4 (1), 42-52.

 Retrieved from: http://www.naho.ca/english/journal/jah04_01/07ViolenceHIV_42-52.pdf.
- Wolf, J., Linseen, L., & Graaf, I.D. (2003). Drug consumption facilities in the Netherlands.

 **Journal of Drug Issues, 33(3), 649-661. Retrieved from:

 http://web.ebscohost.com/ehost/detail
- World Health Organization. Ottawa Charter for Health Promotion. Ottawa: Health and Welfare Canada; 1986. Retrieved from: http://www.who.int/hpr/NPH/docs/ottawa charter hp.pdf

Appendix A Consent Form

Nursing and Health Behaviour Research School of Nursing 302-6190 Agronomy Rd Vancouver, B.C., Canada V6T 1Z3 Tel: (xxx) xxx-xxxx Fax: (xxx) xxx-xxxx

October, 2010

Project Title: Women's Access and Utilization of Crack Cocaine Harm Reduction Programming

Dear Study Participant,

Ingrid Handlovsky, as part of the requirement for completion of the degree of Master of science in nursing is conducting a study with Drs. Victoria Bungay, Joy Johnson and J. Craig Phillips to better understand how in Vancouver's Downtown Eastside (DTES) who use crack practice harm reduction Our aim is to better grasp what women are doing to limit the harms associated with crack use and to understand what factors influence the process of limiting these harms. We hope that by conducting this study we can inform harm reduction service programming in British Columbia to best meet the needs of women living in the DTES who are using crack cocaine.

The study will involve group discussion with women who are currently using crack. Each group will include four women and last for approximately one hour. The group will be guided by Ingrid Handlovsky. You will be asked some questions regarding your experiences with crack use, with a focus on what you do to limit some of the harms related to use, and given the opportunity to discuss these experiences with other women. You will receive twenty dollars for your participation. Your responses and your interactions with the other women participating in the session are confidential; and no identifying information will be recorded.

You have the right to decline to participate in the study or may withdraw at any stage without consequence. If you have any concerns regarding your treatment or rights as a research subject you may phone The Research Subject Information Line at the University of British Columbia at xxx-xxx-xxxx.

Thank you for your assistance. Please keep this information in case you have questions in the future and wish to contact me, Ingrid Handlovsky, at xxx-xxxx or Dr. Vicky Bungay at xxx-xxx-xxxx.

Ingrid Handlovsky

Appendix B Recruitment Flyer

October, 2010

Nursing and Health Behaviour Research School of Nursing 302-6190 Agronomy Rd Vancouver, B.C., Canada V6T 1Z3 Tel: (xxx) xxx-xxxx Fax: (xxx) xxx-xxxx

Women's Access and Utilization of Crack Cocaine Harm Reduction Programming

Are you a woman over the age of 18 who has used crack cocaine in the last 30 days?

Do you live in the Downtown Eastside (DTES) or spend much of your time in this neighbourhood?

You may be eligible to participate in a harm reduction research study

The purpose of this study is to understand how women in the downtown eastside (DTES) neighbourhood use crack and practice harm reduction. We hope to share what we learn with harm reduction programs so that we can better meet the needs of women who use crack cocaine.

This study is being conducted by the school of nursing at the University of British Columbia (UBC).

Please contact Ingrid Handlovsky, at xxx-xxx or Dr. Vicky Bungay at xxx-xxx for more information.

Appendix C

Interview Guide Draft Copy The Process of Safer Crack Use for Women in Vancouver's Downtown Eastside (DTES) Interview Guide

Thank you for agreeing to be part of this group. As you know, we are conducting a study to learn more about what you and other women do to prevent some of the harms or problems that can be related to using crack. We would especially like to hear what you have to say about your own personal experiences, and how your practices with crack may or may not have changed over time. I would like to begin with getting a sense about how you actually use crack and the things that you do to take care of yourself when you use.

Questions:

- 1. To get us started, can you tell me a little bit about how you use crack? For example, when you use, the type of equipment you use, the steps you take, these sorts of things. Probing questions: Do you smoke with others? Is there a place you go to smoke? Are there places you will avoid when you are using? Do you share equipment? Where do you get the equipment?
- 2. Can you describe how you try to avoid some of the problems that can be caused by using crack? (by problems I mean things like mouth burns, the spread of infections, your personal safety when you are on the streets, these sorts of things)

Scenario probing questions, based on the information provided, will include questions such as:

- -If you never share your equipment, can you describe the equipment and where you get it?
- -If you use in a particular space, how did you learn about this space?
- -If you use mouthpieces/non-brillo screens/wooden pushsticks where do you obtain them?
- -If you don't take part in certain practices (eg. "shotgunning" or using alone) why do you chose not to? Did you receive some form of education about problems that can result from certain practices, or have you had a personal experience that stopped you from practicing a certain way?
- 3. Based on what you have shared with me about how you smoke crack, can you tell me more about how you learned to smoke crack the way you do, or how you learned to avoid some of the problems associated with crack use?

 Potential probes:
 - -You said you use a mouthpiece, how did you know to use a mouthpiece? Did anyone show you?
 - -You said you always smoke with others. Why?
 - -You said you never share your pipe. Why? Did someone talk to you about sharing equipment?
- 4. Do you tend to use the above strategies consistently? If not, why not?
- 5. How have these strategies helped you reduce some of the problems associated with crack?
- 6. Why did you decide to change the way you use crack (as described above)?

 Probes: Did you notice others were changing the way they used? Did you talk to your peers or a health provider about how to prevent some of the harms/problems that crack can cause? Are your peers supportive about using the strategies?

7. Have you ever accessed any type of harm reduction program? By this I mean a facility where you were, say, given education on how to reduce some of the problems associated with smoking crack, or provided with equipment to use, or provided with a space to use, this sort of thing. If yes, can you tell me more about that experience, like, where did you go and how did you know about it?

Probe: Do you use these services regularly? Have they been good?

8. What kind of services do you think women who smoke crack need?