RESILIENCE
FROM THE PERSPECTIVE OF THE ILLICIT INJECTION DRUG USER: AN EXPLORATORY DESCRIPTIVE STUDY

by

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ABSTRACT

Illicit injection drug use is a daunting health and social problem that calls for a multifaceted response. Resilience based strategies have the potential to complement the current approach to this problem but there is a paucity of research that would enable scientifically based strategies to be developed. The purpose of this secondary study was to explore and describe resilience from the perspective of individuals who use illicit injection drugs. For the purposes of this research increased resilience was viewed as quitting, decreasing and safer drug use and support seeking whereas decreased resilience was viewed as initial, increased or unsafe drug use and relapse.

This qualitative study used data obtained from a larger qualitative study, conducted in Victoria, British Columbia in 2000, whose purpose was to determine behaviours and contexts that place the IDU at risk. Using Rapid Assessment Response and Evaluation methodology, data were collected from three participant groups: IDU (20 female, 21 male) service providers (45) and community leaders/policy makers (12). This study is limited to the key informant interview and focus group data of the first two groups.

Participants described two types of experiences that were associated with an increase in resilience and one type of experience that was associated with a decrease in resilience. One type of experience associated with increased resilience involved getting to the point of behavioural and attitudinal change either by recognizing drug use was not worth the negative consequences entailed, by getting scared of the effects of drug use, by recognizing an inner desire to quit or by reaching out for support. A second type of experience associated with increased resilience involved envisioning a

better non-drug using future. Participants also described experiences, associated with a decrease in resilience, which involved using illicit drugs to dull emotional pain stemming from abuse, mental illness, alienation, marginalization and hopelessness. Future research using primary data is suggested to increase knowledge of resilience in the context of those who use illicit injection drugs and to evaluate intervention strategies that include the fostering of protective factors in order to strengthen resilience.

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DEDICATION

To the citizens of Victoria who use illicit injection drugs

CHAPTER 1

Introduction

The purpose of this study was to explore and describe the concept of resilience from the perspective of the illicit injection drug user (IDU). Resilience is defined as a family of loosely connected phenomena involving adequate or better adaptation in the context of adversity (Roisman, 2005). Resilience is important in relation to this topic because illicit injection drug use and its attendant harms are a daunting problem that is the source of great human suffering and loss of human potential and is threatening to overwhelm Canada's medical, social and legal systems. The current most effective approach to this problem is thought to be multifaceted including prevention, legal, treatment and harm reduction strategies. Resilience based strategies have the potential to complement the existing approach but there is a paucity of research on this topic that would enable scientifically based strategies to be developed and implemented.

In this chapter, a description of the significance of the illicit injection drug use problem within Canada is followed by an overview of the historical response to the problem and the research purpose and question. Subsequent chapters present the literature on resilience as it pertains to illicit injection drug use, a description of the research methods and the findings of this study. Finally a discussion of the findings and conclusion are provided.

The Significance of the Problem

The use of illicit injection drugs is a health and social issue that entails daunting human and financial costs and consequences for individuals, families and communities in Canada. Based on provincial and city estimates, approximately 100,000 Canadians

inject illicit drugs (Health Canada, 2002). Often most evident in large cities such as the downtown east side of Vancouver, the problem of illicit injection drug use also exists in smaller urban centres and rural areas (Public Health Agency of Canada, 2004; Stajduhar et al., 2004). Nor is the problem confined to one gender, age group or socioeconomic stratum.

The many harms associated with injection drug use include overdose and death, blood borne diseases such as Human Immune Deficiency Virus (HIV), Acquired Immune Deficiency Syndrome (AIDS), Hepatitis C (HCV), Hepatitis B (HBV) and local skin abscesses that too frequently become systemic, resulting in serious conditions such as endocarditis and osteomyelitis (Health Canada, 2002; Canadian Foundation for Drug Policy, 2005; United Nations, 1997; Health Canada, 2004; Stajduhar et al., 2004). Direct medical costs of treating HIV have been estimated at $100,000 per individual and these costs are expected to increase as new medications become available that increase the life expectancy of those who are infected (Health Canada, 2002). In addition to the cost to the health care system, injection drug use results in untold human suffering and loss of human potential and places an extraordinary burden on the law enforcement, correctional and social service systems.

In the 1990s injection drug use emerged as one of the primary means of HIV transmission (Health Canada, 2002). By 1999, injection drug use was responsible for 34 percent of the new HIV cases. Although this dropped to 24 percent by 2002, concern regarding the injection drug use problem led to the initiation of 'I Track', an enhanced surveillance system at selected centres across Canada. The purpose of this surveillance system is to monitor the incidence of HIV and HCV as well as the testing

and risk behaviours of injection drug users (IDUs). HIV prevalence, among the I Track study participants in the pilot phase for Victoria was 16.0 percent, Regina 1.2 percent, Sudbury 10 percent and Toronto 5.1 percent (Health Canada, 2004).

Injection drug use has been identified as a risk factor in at least half of the estimated 275,000 HCV cases in Canada (Health Canada, 2004). It is estimated that in both Vancouver and Montreal there is an 85 percent prevalence rate of HCV in the IDU population with an annual incidence of approximately 26 percent (Health Canada, 2002). HCV prevalence rates among study participants in the pilot phase of I Track, a national surveillance of injection drug use, ranged from 79.3 percent in Victoria to 54.3 percent in Toronto (Health Canada, 2004). The smaller urban centres of Regina, Prince Albert and Cape Breton have estimated HCV prevalence rates among the IDU population of 46 percent, 50 percent and 47 percent respectively (Health Canada, 2004).

Approximately one fourth of people who inject illicit drugs in Canada are women and by 2002, one fourth of all the HIV cases in Canada were women (Health Canada, 2002). The major risk factors for HIV in females are heterosexual transmission and injection drug use. Between 1989 and 1992 the proportion of AIDS cases in women that could be attributed to injection drug use increased from 6 percent to 15 percent and between 1993 and 1996 the increase was from 15 percent to 24 percent (Canadian Foundation for Drug Policy, 2005). HIV positive women have the potential of transmitting the infection to their infants either at birth or by breastfeeding. As of 1996, 116 AIDS cases in Canada have been attributed to perinatal transmission (Canadian Foundation for Drug Policy, 2005).

Thirty percent of participants of a national surveillance of IDUs in Canada (I-Track) reported initiation of injecting at the age of 16 years or younger (Health Canada, 2004). Street-involved youth, youth who inject drugs and young men who have sex with men are particularly vulnerable to HIV infection (Health Canada, 1994). Street life is associated with a high incidence of survival sex and injection drug use (Health Canada, 2002). HIV prevalence in youth varies. In a national surveillance study, in 2001, one percent of street youth tested positive for HIV (Health Canada, 2001) whereas, in the Vancouver Injection Drug User Study (1996 to 2001) 17 percent of youth tested HIV positive.

The problem of illicit injection drug use has been documented both by a Canada wide surveillance system (Health Canada, 2004) and in locally focused studies (Stajduhar, Poffenroth & Wong, 2000; Stajduhar et al., 2004; Vandu, 2003). Clearly a complex problem extending across all age, gender and socioeconomic groups and involving both medical and social harms that entail daunting costs to the health, social and law enforcement systems, illicit injection drug use calls for a multifaceted response.

Response to Illicit Injection Drug Use

Injection drug use and its multiple attendant harms pose an increasing public health problem that has not been addressed adequately by existing abstinence, law enforcement and risk based policies and programs (Health Canada 1994, 2001, 2004). The lack of an in-depth understanding of resilience in the context of illicit injection drug use has hampered the development of resilience based strategies that have the potential to complement the existing response to this significant public health problem.

In Canada, as in the industrialized countries of western Europe, the response to the problem of illicit injection drug use has changed over time. Prior to the 1980s, there was almost a total reliance on abstinence-based strategies (Tukka, 2004). An assumption of the abstinence paradigm is that substance abuse is a moral/legal problem; law enforcement strategies were relied on to decrease the prevalence and incidence of drug use by reducing or eliminating the drug supply and incarcerating both those who sold and those who used illegal substances (MacCoun, 1998).

Abstinence based drug recovery and treatment programs, for the most part, were reserved for those who had already successfully abstained, at least for a short period of time, from the use of illicit substances. However, the effectiveness of an exclusively abstinence based approach came to be questioned by British pharmacists and physicians who advocated for the prescription of opiates to drug addicts who had not been successful in, or not qualified to access, abstinence based programs (Tukka, 2004). Inciardi (2004) states that by the mid 1980s there was a growing realization that abstinence based policies and programs and the war on drugs had failed to eliminate or even significantly decrease drug supply or drug use. In addition, the harms associated with the abstinence approach, which entailed denial of access to services and to information and involved long term incarceration to those who were addicted to drugs, were gaining recognition. An alternate lens was needed with which to view the problem.

The roots of the philosophy of harm reduction are found in the scientific public health model, which is grounded in humanitarianism (Tukka, 2004). Harm reduction provided the philosophical basis to overcome the barriers of abstinence based policies

and programs that prevented those who were actively using illicit drugs to access information and services (Hodgins, 2005). Harm reduction programs were first initiated in Liverpool, Amsterdam and several other European cities (Tukka). Although harm reduction policies and programs have since gained ground in many Canadian and western European settings, Stajduhar et al. (2000, p. vi) state that there continue to be missed opportunities in the prevention, care and treatment of people addicted to drugs due to approaches that focus on an 'abstinence only' approach.

Harm reduction policies and programs focus on reducing both the risk and the harms associated with the risk. Harm reduction is often incorporated into a multifocused approach to problematic substance use such as the four pillar approach recommended in Canada's Drug Strategy (Health Canada, 2002). The four pillars represent prevention, enforcement, treatment and harm reduction. This multifocused approach has provided new hope for an effective and humane approach to the problem of substance misuse. Innovative harm reduction strategies such as needle exchanges, safe injection sites and methadone and heroin maintenance programs have made significant gains in reducing the harms associated with illicit injection drug use (Health Canada, 2002, 2004; Public Health Agency of Canada, 2004, 2005). However, there is a growing voice for the inclusion of resilience as an additional and complementary response to significant health related problems (Jacelon, 1997; Johnson & Wiechelt, 2004; Tusaie & Dyer, 2004; Werner & Smith, 1982).

Resilience based policies and programs typically focus on strengthening protective factors and processes that are associated with successful outcomes. As such they hold the promise of becoming an effective component of a multifocused

health response to illicit injection drug use. Yet there are significant gaps in our understanding of this concept that hamper the development of strategies to support resilience on the front lines. Research is needed to explore resilience in the context of illicit injection drug use in order to develop effective resilience based strategies to mitigate this significant public health problem.

Research Problem and Purpose

To date, very few research studies have been conducted on resilience in the context of the illicit injection drug using population. No research studies with the explicit purpose of exploring resilience from the perspective of those who inject illicit drugs were found. The purpose of this study was to explore and describe resilience from the perspective of those individuals who inject illicit drugs.

Research Question for this Study

The purpose of this study was to explore and describe resilience from the perspective of the illicit injection drug user. The research question was, "What are the experiences in the life of the illicit injection drug user that are associated with a change in the degree of resilience?"

Specific objectives were:

1) To describe experiences that are associated with changes in resilience among illicit injection drug users and

2) To identify protective factors or processes that are associated with a change from a lesser to a greater degree of resilience.

CHAPTER 2

Literature Review Resilience

Resilience has been conceptualized as a state and as both a psychological and physiological process. In this section, an overview of the origins of the concept is followed by a discussion of the psychological and then the physiological process models of resilience as they pertain to illicit injection drug use. Two discrepant views within the conceptualization of resilience are then explored. This is followed by a discussion of the context dependent nature of resilience and the research focused on resilience in specific populations.

Origins Of The Concept Of Resilience

The term resilience originated in physics where a resilient object was defined as one that does not break but bends under stress and then springs back to its original shape (Brendtro & Longhurst, 2005). The current interest in the concept of resilience grew from the observation that some individuals coped better than was expected considering their dire circumstances (Tusaie & Dyer, 2004). The findings of long term prospective studies indicated that, even for children exposed to severe and multiple risk factors, it was unusual for more than 50 percent to develop severe problems (Jacelon, 1997; Werner & Smith, 1982). This observation led to the realization that, historically, the focus of health care had been on symptomatology, victimization, pathology and risk factors and there existed a need to lessen the emphasis on negative outcomes and to look at successful adaptation in spite of adversity (Jacelon; Johnson & Wiechelt, 2004; Tusaie & Dyer).

Resilience As A State

Resilience was first conceptualized as a state, and it is from this early research that the main constructs of protective factors and risk factors were developed. Relevant research related to each of these constructs is discussed in this section. Although, resilience, for the most part, is no longer conceptualized as a state, protective and risk factors continue to be recognized as important constructs in the conceptualization of resilience as a process.

Protective Factors

Johnson and Wiechelt (2004, p. 659) state that "individuals and families demonstrate resilience when they draw on inner strengths, skills and supports ...". 'Protective factor' is defined as any characteristic of individuals or groups that make them less vulnerable to a risk (Jacelon, 1997; Johnson & Wiechelt). Rutter (1993) postulated that protective factors came into play during key turning points and were possibly only apparent in times of stress.

Garmazy (1991) categorized protective factors as individual, family or community and this organizational framework was adopted by other researchers (Fine, 1991; Werner & Johnson, 2004) although the community category has been broadened to include the larger sociopolitical and physical environment. Protective factors of the individual were identified as a high activity level, the ability to elicit a positive response from others, autonomy, self-efficacy, hopefulness, sense of purpose and areas of talent or accomplishment (Werner, 1989). Also recognized were cognitive factors such as reflectiveness, optimism, intelligence, creativity, a belief system that provides existential meaning, a cohesive life narrative, self-worth, an appreciation of one's uniqueness and

good fortune (Carbonell et al., 2002; Masten, 1994; Patterson, 2000; Werner & Smith, 1982). In addition, physical attractiveness in females (Jacelon, 1997) and individual competencies such as coping strategies and social skills were identified as protective factors (Tusaie and Dyer, 2004).

Werner (1989) Werner and Smith (1982) and Garmazy (1991) identified family and community protective factors. Family protective factors include a warm, supportive, stable environment, presence of an attentive and caring parent and perceived family connectedness. Community protective factors consist of extrafamilial support from peers, adults and role models, school affiliation, religious faith or church affiliation, access to community resources, adequate housing and medium to high socioeconomic status.

Although the presence of protective factors indicates that the individual is predisposed to a more positive outcome, this is far from assured. A protective factor appears to have varying protective properties between individuals or within one individual across time (Johnson & Wiechelt, 2004). For instance, two individuals with the same level of intelligence and sense of purpose may not achieve the same level of success in life and this level of success may vary between educational, adult work and interpersonal relationship domains.

Risk Factors

A risk factor is defined as a biological, developmental or psychosocial event that increases the likelihood of a negative outcome in an individual or group (Tusaie & Dyer, 2004). Risk factors are an integral part of the concept of resilience because together with vulnerability they provide the preconditions or impetus that calls protective factors

into play. Flach (1988) labelled the entry of stress into an individual's homeostatic system as the 'bifurcation point'. These points of entry have also been referred to as key turning points (Rutter, 1993) and points of reorganization (Horowitz, 1987).

Tusaie and Dyer (2004) suggest the categories of anticipated and unexpected risk factors. Anticipated risk factors are exemplified by developmental transitions such as those involved in school entry, detachment from parents during adolescence and childbearing. Unexpected risk factors are events such as family disruption due to mental illness, addiction, legal problems or unemployment and environmental risk factors such as flood, drought, famine or socio-political risks such as terrorist attacks or even, as happened relatively recently in British Columbia, changes in unemployment insurance legislation that reduce income.

Risk factors may occur individually, simultaneously or consecutively and may have a cumulative effect over time (Johnson & Wiechelt, 2004). Although an individual exposed to a risk factor is more highly associated with a negative outcome, Tusaie and Dyer (2004) caution that outcome can not be predicted with confidence from the presence of a risk factor as a risk factor is a necessary but not sufficient precondition for the expression of resilience.

As Johnson and Wiechelt (2004) note, the list of protective factors and risks that resulted from research to identify the characteristics of individuals that coped better than was expected considering their high risk circumstances contributed to the understanding of the concept of resilience but appeared to be too simplistic to account for the observed variation in resilience. How these protective factors and risk factors interacted remained largely unexplained and hampered the usefulness of the concept.

Resilience As A Process

As a shift from case studies and retrospective studies to prospective longitudinal studies occurred, resilience was no longer viewed as a state but as a complex and dynamic process (Tusaie & Dyer, 2004). Numerous process models were developed in an attempt to explain the complexity of the concept of resilience. In this section the numerous psychological process models, as well as a physiological model of resilience, are discussed.

Psychological Models Of Resilience

In Flach's (1988) multistage cyclical model of resilience, the introduction of a risk factor disrupts the individual's homeostasis causing chaos followed by the activation of protective factors that eventually return the system to its former homeostasis. Horowitz (1987) viewed resilience as the outcome of a complex, dynamic interplay between certain genetic and non genetic characteristics of individuals or systems and the broader environment. In her structural behavioural model of child development, Horowitz proposed a concept of relative resilience. Horowitz's model is based on several assumptions. The first assumption is that everyone has some measure of resilience, just as everyone has other individual characteristics such as height and weight. Viewing resilience through this lens, the question to ask is not if an individual is or is not resilient but how resilient is an individual at a point in time? A second assumption of Horowitz' is that everyone experiences points of reorganization in their life in which their level of resilience increases or decreases. The measure of resilience would vary and be determined according to the context.

Fine's (1991) model articulated two related but separate processes within resilience. The first includes an acute phase where the individual's energy is directed at minimizing stress. It is in the second, reorganization stage, that not only a return to the former homeostasis, but the possibility of learning from adversity and becoming stronger or more efficient as a result, is seen. Rutter (1993) in a model similar to Howowitz (1987) proposed a simple continuum with vulnerability at one end and resilience at the other. Rutter suggested four potential protective processes. The first was reduction of the impact of the risk by altering one's exposure or involvement with the risk. The second protective process, similar to a harm reduction approach, was reduction of the negative chain of reaction following the introduction of the risk. The third was the promotion of self-esteem and self efficacy through successful completion of tasks or the development of support systems and the fourth protective process was the opening up of new opportunities or a new world view.

Other models appeared out of the continuing need to understand the variation and complexity of resilience and all of these models defined resilience as a dynamic process that was influenced by time, developmental stage and context (Brown & Kulig, 1996; Mastin, 1994; Richardson, Neiger, Jensen & Keumpfer, 1990; Tusaie & Dyer, 2004). The Resilience Process Model of Richardson et al. proposes a biopsychospiritual homeostasis that, when disrupted by a risk factor, results in one of four outcomes 1) resilient reintegration resulting in growth, self-understanding and increased resilience, 2) reintegration back to the former homeostasis, 3) reintegration with some loss of former function or 4) dysfunctional reintegration.

Brown and Kulig's (1996) two level model of resilience, to be applied to either individuals or communities, has similarities to the two processes of Fine's (1991) model and the third and fourth protective processes suggested by Rutter (1993). The first level of Brown and Kulig's model is reactive, in that the individual or community is seen as reacting to stress in order to be able to carry on. The best outcome that can be hoped for at this first level is a return to the former state before the stress occurred. The second level is proactive, in which the individual or community adapts or transforms so that the outcome is an increased capacity to anticipate stress and to minimize or to avoid future stressors. Brown and Kulig clearly state what Horowitz's model (1987) implies, that the question to be asked about resilience is not if an individual or community is resilient but what are the processes that move the individual or community towards or away from being more or less resilient.

Physiological Model Of Resilience

Exploration of the concept of resilience can be found in the literature of the physiological aspects of stress (Tusaie & Dyer, 2004). A physiological lens has much to contribute to an understanding of resilience within the area of addiction and such treatment strategies as methadone maintenance programs. One branch of biomedical research is currently focused on exploring the neurological and physiological factors that account for the intergenerational transmission of addictive behaviour (Schuckit, 1991). Brendtro and Longhurst (2005) discuss resilience in terms of specific areas of the brain that are involved in resilient behaviours. They state that recent research on the physiology of the brain indicates that everyone is resilient and those who are less resilient can be 'rewired' by positive learning experiences. Johnson and Wiechelt

(2004) state that resilient outcomes are more common than originally realized and that negative outcomes are the anomaly. However, there is evidence that once adaptation systems are compromised then negative outcomes become more prevalent (Johnson & Weichelt) and this negative cycle can be seen in individuals, such as those who use injection drugs, who are exposed to extreme and sustained adversity.

Discrepant Views On the Conceptualization of Resilience

Resilience has been defined in both positive and negative terms. Werner (1989) identified resilient individuals as those who met child and adult developmental milestones. Others have defined resilience in children and adolescents by the lack of internal and external psychopathological symptoms or psychiatric disorders, using instruments such as the Child Behaviour Checklist (Carbonell et al., 2002). A disagreement exists between those whose definition of resilience is confined to individuals who have never succumbed to risk factors or exhibited behaviours or symptoms such as mental illness, substance misuse, delinquency or post traumatic stress syndrome (Rutter, 1993; Werner, 1989) and those who view resilience through a broader conceptual lens that encompasses recovery as a special case of resilience (Brown & Kulig, 1996; Horowitz, 1987; Miller, 2003; Roisman, 2005). In this latter view, resilience includes successful adaptation following a period of maladaptation or developmental difficulty. Viewed through this broader conceptual lens, everyone is seen to have some level of resilience and the question to ask is not is this person resilient but what are the processes that increase or decrease resilience within this person (Brown & Kulig, 1996; Horowitz, 1987).

A second controversy concerns the outcomes of the resilient process. One opinion is that resilience is a one stage process that concludes with a return to the former, pre-risk state (Flach, 1988). However, many process models while incorporating the first stage have suggested a second stage of resilience that results in a new, improved post risk outcome in which the individual undergoes change characterized by being better equipped than formerly to anticipate and respond to risks and is, in fact, more resilient (Brown & Kulig, 1996; Horowitz, 1987; Richardson et al., 1990; Rutter, 1998). Tebes, Irish, Vasquez and Perkins (2004) state that coping with adversity may result in cognitive transformation leading to enhanced adaptation and that this enhanced adaptation is a marker of resilience.

Further research is needed to address these areas of disagreement in the conceptualization of resilience and to clarify how protective processes and risk factors interact to increase or decrease resilience within individuals. Qualitative research is particularly suitable to explore and describe this immature concept and move it towards readiness for use on the frontlines of nursing practice.

Context Specificity

It is generally agreed in the literature that resilience is context dependent and this is thought to at least partially explain the variation in resilience seen between and within individuals. Variation within an individual in different developmental domains is exemplified by the child raised in poverty with an abusive family who successfully achieves adult education and career goals but is not able to achieve normal interpersonal relationships (Tusaie & Dyer, 2004). Johnson and Wiechelt (2004) suggest that a holistic framework to view resilience should include the contexts of age

and developmental stage, family history, social class, ethnicity, gender and change over time.

Resiliency Research In Specific Populations

Studies of resilience within the context of the injection drug using population were not found, however, studies in areas relevant to this context are discussed below. Werner (1989) found that children who grow up in poverty are more vulnerable to negative health and developmental outcomes. The negative influence of low socioeconomic status on resilience has since been recognized (Ferrar & Palmer, 2004). Starfield, Riley, Wit and Robertson (2002) looked specifically at the connection between poverty and lowered adolescent health status. Hall (1999) and Zerwekh (2000) have discussed resilience in the context of marginalization and disenfranchisement. The illicit injection drug using population is more likely to live in poverty and suffer marginalization, disenfranchisement and stigmatisation (Stajduhar et al., 2000, 2004).

The Vancouver Area Network of Drug Users (Vandu, 2003) has stated that adequate housing is a necessary first step towards addiction recovery. Resilience has been studied in the context of homelessness (Rew, Chambers & Kulkarni, 2002; Rew, Taylor-Seehafer, Thomas & Yockey, 2001) suggesting that while homeless people may possess considerable resilience they face significant obstacles to successful outcomes that the housed do not face.

Adult resilience has been studied in the context of specific disease processes such as ovarian cancer (Wenzel et al., 2002) and breast cancer (Bowen, Morasca & Meischke, 2003). A medical model of addiction views addiction as the result of physiological problems and genetic propensities similar to other disease processes.

While this view eliminates the view of addiction as a moral problem it does not account for the social aspects of the disease.

A warm supportive family environment has been identified as a protective factor contributing to resilience (Garmazy, 1991). The resilience of families has been studied in terms of health-promoting lifestyles (Monteith & Ford-Gilboe, 2002) and the relationship between family connectedness and sexual risk taking (Tuttle, Landau, Stanton, King & Frodi, 2004).

Addiction and mental health problems are often co-occurring conditions (Public Health Agency, 2005). The role of resilience in depression (Adams, Sanders & Auth, 2004; Carbonell et al., 2002; Miller & Chandler, 2002) and in suicide (Rew, Thomas, Horner, Resnick & Beuhring, 2001) has been studied. Katerndahl, Burge and Kellog (2005) studied predictors of resilience and adult mental disorders in women survivors of childhood sexual abuse. Resilience and post traumatic stress disorder, in the context of war hostages (Saab, Chaaya, Doumit & Farhood, 2003) and disasters such as a nightclub fire (Badger, 2004) has also been the focus of research studies. Illicit injection drug use is associated with high levels of physical and emotional trauma both from the family of origin and from ongoing sources such as sex trade work and marginalization.

Resilience Research From The Nursing Literature

Nursing has long been interested in an understanding of factors that protect health by promoting emotional and physical well-being and quality of life. The Nursing literature addresses a wide range of topics on the psychosocial aspects of resilience including family violence (Heinzer & Krimm, 2002; Martin, 2002), family relations and

sexual behaviour of young women (Tuttle et al., 2004) substance abuse and sexual risk taking in women (Lindenberg et al., 1998) post traumatic stress disorder (McCullough-Zander & Larson, 2004; Seng, 2003) marginalization and disenfranchisement (Hall, 1999; Zerwekh, 2000) and health care inequalities (Lynam, 2005).

Additional areas, relevant to the illicit injection drug using population, addressed by nursing research are the role of self concept and the role of spirituality. Stein, Roeser and Markus (1998) in their study of the role of self-concept in adolescent risk behaviours found that self concept may be a determining component not only as an antecedent to but also in the continuing participation in risk behaviours. Sowell (2000) looked at the connection between spiritual activities and wellbeing among a group of HIV positive women. These studies suggest that a positive sense of self and spiritual activities may be protective factors that contribute to resilience. Increased in-depth knowledge of the concept of resilience is significant to Nursing as well as other disciplines as this concept holds the promise for the development of practice applications designed to strengthen the resilience of vulnerable individuals and groups.

Resilience And Substance Abuse

Research on resilience in the context of substance abuse has mainly focused on identifying the characteristics of resilient children of adults who misuse drugs (Pilowsky, Zybert & Vlahov, 2004) youth at high risk for substance abuse (Hostetler & Kirk, 1997) and the role of caring adults in the lives of children of alcoholics (Werner & Johnson, 2004). Austin (2004) states that the role of culture and the dynamics of the protective processes of resilience are not fully understood and should be explored to allow for the development of effective prevention and treatment programs (Austin, 2004). Austin's

study of drug use and violent behaviours in native Hawaiians suggested that ethnic pride may be an important protective factor against violence in this group. Several studies, not designed specifically to look at resilience, nevertheless contributed knowledge of possible protective factors that may promote resilience. Nyamathi, Flaskerud and Leake's (1977) study of HIV risk behaviours, mental health characteristics and support systems of 240 homeless, drug recovering women suggested that those at risk for depression and illicit injection and non-injection drug use tend to chose support persons who are themselves at high risk for the same problems. Nyamathi (2004) identified the characteristics of homeless women who want to permanently quit alcohol, cocaine or heroin use. The characteristics of the one third of the 748 participants who wanted to quit drug use were: recognition that their substance use was an extremely serious problem, not associating with other drug users, a history of hospitalization for drug use and recent substance use treatment.

Tebes et al. (2004) studied transformative change in a study of 35 young adults who had experienced the death of a parent in the previous two years. The study findings suggest that individuals exposed to adversity may experience cognitive transformation, which is seen as a form of enhanced adaptation and may be a marker of resilience. Cognitive transformation is characterized by a turning point in which the individual recognizes that coping with adversity has opened up new opportunities and as a result revaluates the experience from negative to positive or growth-promoting. These turning points may be an example of re-organizational points as defined by Horowitz (1987).

Aronwitz and Morrison-Beedy (2004) looked at resilience in the context of mother-daughter connectedness, risk taking behaviours such as substance abuse and a hopeful view of the future in a population of impoverished African American girls. The study results contrasted with earlier studies in that no relationship was found between connectedness and resilience. The girls with a more hopeful view of the future were found to be the most resilient.

In summary, although resilience has not been a focus of study within the specific context of injection drug use, it has been studied in many associated areas. The negative effects of poverty, homelessness, co-occurring mental health disorders, history of abuse and post traumatic stress disorder on resilience and the suggested positive effects of a positive self concept, spirituality, family connectedness and hope for the future on resilience have implications for the injection drug using population. There is a need to look at all these issues specifically within the context of injection drug use and to identify these and other protective factors and processes that work towards resilience in this vulnerable population.

Resilience Intervention and Treatment Programs

Intervention and treatment programs designed to strengthen resilience are based on the assumption that protective factors contribute in some way to resilience. Brown (2001) critiqued the effectiveness of such programs as Drug Abuse Resistance Education (D.A.R.E.) and Life Skills Training (L.S.T) and recommended resilience-based programs as a more effective approach. A need for resiliency based programs for high risk individuals and families has been identified (Tuttle et al., 2004) both for prevention of substance abuse (Glance–Cleavland, 2004; Harvey & Hill, 2004; Kaplan,

Turner, Norman & Stillson, 1996; Lindenberg et al., 2002; Rew, 2003; Richardson et al., 1990; Sandau-Beckler, Devall & de la Rosa, 2002; Werner, 1998) and for those already involved in substance abuse (Miller, 2003; Roisman, 2005). Johnson et al. (1998) report on a program designed to increase family resilience and thereby prevent or reduce alcohol and other drug use among high-risk youths. Lindenberg et al. (2002) favourably compared the effectiveness of a combined risk and resilience based intervention to a health information program in reducing sexual and substance abuse behaviour among young, low income Mexican American women. A better understanding of resilience among illicit drug users could provide direction for new programs and policies.

Summary

The current interest in resilience came from the need to account for the 50 percent of individuals who suffer negative circumstances yet who have unexpectedly good outcomes. Resilience, first viewed as a state, is currently conceptualized as a context dependent process. The basic constructs of resilience are protective factors and risk factors but the dynamics of the interaction between these is, as yet, poorly understood.

Johnson and Wiechett (2004, p.665) refer to resilience as a "data scant field", and recommend research to increase knowledge of the multiple interactive processes of protective and risk factors. Ungar (2003) identifies arbitrariness in selection of outcome variables as a problem with the research in resilience and, in addition, states there is a significant gap in knowledge of the influence of social and cultural context in which resilience occurs. Other key areas in the current thinking on resilience that

require further research are: the role of relationships, both familial and extrafamilial, in the prevention of substance abuse, protective factors that contribute to resilience in specific contexts and the relationship of cognitive transformation to indications of resilience (Johnson & Wiechett). In addition, there remains disagreement concerning the number of stages within the process of resilience and if recovery can be viewed as a special case of resilience. Tebes et al. (2004) recommend that future research explore resilience as it relates to recovery among specific populations including addictions, mental disorder and acute and chronic illness.

Illicit injection drug use is a momentous public health problem. Due to the significance of the problem and the variability of its presentation across gender, age and geographical contexts, studies to enhance understanding within a specific context are required to guide the public health response. Among the guiding principles that emerged from a study done in Victoria, British Columbia, on which this secondary study is based, were that differing philosophical approaches be included in public health strategies for injection drug use and that people with addictions must play an integral role in the development of services that affect them (Stajduhar et al., 2000, 2004). Although the main philosophical approaches focussed on in the original study were abstinence and harm reduction, this may be extended to include the consideration of resilience based programs to complement existing services based on abstinence and harm reduction philosophies. Also, studies that give a voice to resilience from the perspective of the illicit drug user have the potential of providing valuable information to the development of the concept of resilience and the design of resilience based strategies within this context.

CHAPTER 3

Methods

Introduction

In this section the research design of both the original study and the secondary study that is the subject of this proposal are described: its sampling method, data collection procedures, means of ensuring rigor and procedures for protection of human rights. The description of data analysis will be confined to the proposed secondary study.

Research Design for this Study

An exploratory descriptive approach to qualitative research was the design chosen for this secondary study. A qualitative research design is appropriate due to the immaturity of the concept of resilience (Johnson & Wiechett, 2004; Tebes et al., 2004; Ungar, 2003) and the lack of in-depth knowledge of the specific research question of this study (Morse & Field, 1995, 2004). Qualitative secondary analysis is a credible method to focus on a concept or question that appeared to be evident but was not specifically explored in the original study (Hinds, Vogel & Clarke-Steffen, 1997; Thorne, 1994). Hinds et al. (p. 420-421) provide an assessment tool to determine the fit of the secondary research question to the data provided by the original study. Using this tool the following criteria were met 1) the concept of interest was reflected in sufficient depth in the data set, 2) it is likely the study sample could be expected to experience this concept, and 3) the data set of the original study was of sufficient quality, completeness and fit with the secondary research question. The fourth criteria was partially met in that the proposed research question was somewhat similar to that of the primary study,

which is to further the understanding of injection drug use and HIV/AIDS.

The selection of an exploratory descriptive approach was based on the purpose of the study, which was to explore and describe resilience as it is expressed from the perspective of the IDU. Descriptive research, a type of nonexperimental study, is designed to describe and document aspects of a situation from the emic perspective and to serve as a possible starting point for future hypothesis generation or theory development. Although an in-depth understanding is sought, sometimes researchers can do little more than describe existing relationships without fully comprehending the complex causal pathways that exist (Polit & Hungler, 1995). Rather than causal relationships or seeking to explain why the study participants are more or less resilient, the purpose of this study was to describe resilience from their perspective.

This study used secondary data obtained from a larger qualitative study, conducted in Victoria, British Columbia in 2000. The purpose of the original study was to determine behaviours and contexts that place IDUs at risk for blood-borne diseases and to draw on this information to develop interventions to reduce the harm associated with injection drug use (Stajduhar et al., 2000, 2004). The principal investigators of the original study were Kelli I. Stajduhar, R.N., Ph.D., Clinical Nurse Specialist, Capital Health Region of Victoria, B.C. and Linda Poffenroth, M.D., MSc., Community Medicine, Deputy Medial Health Officer & Manager Disease Surveillance, Capital Health Region, Victoria, B.C. The co-investigator was Elsie Wong, B.S.N., M.B.A., Field Surveillance Officer, Health Canada, BC Centre for Disease Control, STD/AIDS Control. The project was funded by the Division of HIV Epidemiology, Bureau of HIV/AIDS, STD & TB, Laboratory Centre for Disease Control, Health Canada, the B.C.

Ministry of Health and the Capital Health Region, Victoria, BC.

Research Design of Original Study

Rapid Assessment Response and Evaluation (RARE) methodology was the research design chosen for the original study. The RARE method is designed to guide the development of prompt, community focused interventions in response to emerging diseases and other public health problems (Stajduhar et al., 2000). The key components of RARE methodology are a focused approach, short completion time, built-in evaluation, inclusion of community consultation and strong partnerships between front-line community workers and researchers.

Data Collection Methods and Description of Sample

There were three groups of participants: IDUs (20 female, 21 male) service providers and community leaders/policy makers (see Table 1). This study was limited to the use of the IDU and service provider key informant interview and focus group data.

Table 1. List of study participants

Category	Key Informant Interviews	Focus Group Interviews	Total
Injection Drug Users	17	24	41
Service Providers	20	25	45
Policy Makers/Community Leaders	12	0	12
TOTAL	49	49	98

The three recruitment strategies used were nominated sampling, targeted sampling and advertising. The focus of the sampling strategies was to recruit key informants within each of the three groups with in-depth knowledge and experience of

injection drug use. Target sampling was used to find IDUs who were unknown to the research team. Once interviewed, the IDUs were asked to nominate their peers. Advertising consisted of posting notices in service delivery areas that IDUs frequent. Sample size was not determined in advance but was based on saturation. All IDU participants received a $20 stipend to cover expenses incurred.

Data collection methods included: key informant interviews, focus groups, questionnaires to obtain demographic and drug and disease information from the IDU participants, IDU participant observation (70 hours), geo mapping to document service and risk locations and 15 rapid assessment surveys to fill in gaps in the data. The field team members, who included street nurses and other frontline outreach workers, were crucial to the recruitment plan as they were able to invite people to participate whom they knew to be currently using injection drugs and to have in-depth knowledge and experience within the injection drug using community.

Key Informant Interviews

The interviews ranged from 30 to 120 minutes. Permission was obtained to audiotape all but one of the interviews and these were transcribed in full. In addition, interviewers made extensive notes as soon after the interview as possible. Interviewers were instructed to keep the interviews focused on the research objectives and were provided with questions to be used as a guide only (see Appendix A for Interview Guide – Injection drug Users & Appendix B for Interview Guide – Service Providers).

Focus Group Interviews

A total of seven focus groups were conducted with two participant groups as follows: three IDU (24 participants) and four service provider (25 participants). The IDU

focus group participants did not take part in key informant interviews. Participants for each of the focus groups were selected to capture a specific lens on injection drug use. For the injection drug use focus groups this was 1) youth, 2) female adult, and 3) male adult and for the service provider focus groups this was 1) mental health service providers, 2) aboriginal service providers, 3) people working in community-based and non-profit organizations, and 4) police constables.

The focus groups were audiotaped and transcribed in full. A recorder was present during the group sessions to record the main themes that emerged. The group facilitator promoted discussion concerning the research objectives and used questions similar to the key informant interview guide questions.

Questionnaires

Demographic and drug and disease related information was collected by a questionnaire adapted from the HIV seroprevalence study conducted in Victoria in the Fall of 1999. The questionnaire was administered to the IDU participants at the start of key informant interviews and focus groups. Forty-one IDU questionnaires were completed.

Demographics

Twenty-one of the IDU participants were male and twenty were female; of these 11 were youth between the ages of 15 and 24 years of age. Ethnicity was identified by the participants as White (29), Aboriginal (6) and Middle Eastern (2). Four participants did not identify their ethnicity. More than half of the sample had not completed high school; six had completed high school and seven had some post secondary education. Fifteen participants reported relatively stable housing (apartment, house, boarding

house) in the past three months and 33 participants reported unstable housing (living on the street, squatting, hospitalization, incarceration) within the last three months. Just under half of all participants were or had been on social assistance and nine participants received government disability benefits. The majority (34) earned most of their income through drug dealing, panhandling and working in the sex trade. Other sources of income were "squeegeeing" and criminal activities such as break and enter. Nineteen of the 40 participants that responded to the question had previously worked in the sex trade (14 women, 5 men) and seven of these participants were currently working in the sex trade (6 female, 1 male). On average, the participants reported spending from $100 to $200 per day on their drug habit.

Drug use patterns.

Age of first injection ranged from less than 15 years for eight participants and less than 20 years for 27 participants (13 female and 14 male). The drug of choice was heroin (4) cocaine (6) and both heroin and cocaine (25). There were no gender differences in drug choice. Of the 40 participants who responded to the question of sharing injecting equipment, 29 had shared with another person (16 female, 13 male).

Hepatitis C and HIV status.

Thirty-six participants stated they had tested for HCV (19 female, 17 male) and of these 19 (11 female, 8 males) self-identified as HCV positive. Thirty-six (18 female, 18 male) participants also stated they had tested for HIV and of those tested 9 (7 females, 2 males) self-identified as HIV positive.

Drug and alcohol treatment.

Nineteen had accessed a drug and alcohol treatment program in the 12 months

preceding the study. Approximately 12 had tried but been unsuccessful in accessing a drug and alcohol treatment program mainly due to long wait times.

Data Management and Analysis for this Study

In this section, the analytic framework for this study, Horowitz's construct of re-organizational points (1987) and analytic techniques related to grounded theory and other data management tools will be discussed.

For the purpose of this study, relevant data segments were identified and retrieved from the IDU and service provider data of the original study. Horowitz's construct of re-organizational points (1987) that correspond to a change in the degree of resilience was used as an analytic framework. This is a particularly suitable framework to guide but not limit the analysis of the data of this secondary study as it is a component of a process model that acknowledges the dynamic and complex nature of resilience. Horowitz based his model on the assumption that everyone has some "degree" of resilience that varies over time (p. 151). Resilience is viewed on a continuum in which the individual that is relatively invulnerable to adversity is said to have "strong resilience" whereas the individual that is relatively vulnerable to adversity is referred to as having "low resilience". Those who have exhibited negative behaviours and outcomes, such as the illicit IDU, may be said to have some level of resilience and that this level of resilience may vary over time. Examples of possible re-organizational points in the life of an illicit IDU may be experiences related to surviving an overdose, having one's children removed by social services or connecting with a new support person

Other resilience models and studies discussed in the literature review contribute

to an understanding of resilience and were used in the analysis of the IDU and service provider data. For example, protective factors identified by Garmezy (1991) and Werner and Smith (1982) and instances of cognitive transformation as described by Tebes et al. (2004) were sought. In addition, the researcher used knowledge gained both as a frontline nurse working with illicit IDUs and as an interviewer and focus group facilitator for some of the service providers in the original study.

Data analysis techniques used in grounded theory research, such as constant comparison and open coding (Morse & Field, 1995) were used. Immersion in the data was achieved by careful and multiple readings. All data segments were reviewed line-by-line, potential "rich points", data that appeared to be especially relevant to resilience, were highlighted and first level codes that emerged were noted. Data was compared and contrasted both within and across individual interviews. In addition, particular attention was paid to repetitions, potential inconsistencies or contradictions, and surprising or unusual language or information within an individual interview and across interviews.

"Memoing" was used to increase the conceptual level of the analysis by capturing the ideas and insights of the researcher. Selective coding was accomplished by identifying the relationships between the first level codes that allowed them to be sorted or condensed into more abstract categories. In the final phase of analysis each category was further analysed to allow identification of the major themes.

Microsoft Word 2003 was used to cut and paste data into individual word documents for ease of sorting. Interviews and all documents containing data were stored in either a computer with password access or in a locked file cabinet. The

researcher used a diary to document personal bias and the decision-making trail and consulted with her thesis committee and the principal investigators of the original study on the reliability and validity of the process and findings. In the final phase of the analysis, the researcher returned to the data to check that the major themes that had emerged were true to individual interviews.

Ensuring Rigor in this Study

There are a range of criteria to ensure rigor in qualitative research. The four criteria that were used in this study to guide the conduct of this research project were: credibility, transferability or applicability, dependability or consistency and confirmability or neutrality (Morse & Field, 1995).

Credibility refers to the level of confidence in the truth of the findings and was addressed in this study by: supporting analysis and interpretation with direct quotes from the data; triangulation of data sources (IDUs and service providers); and drawing on the researcher's clinical experience in providing health care services to the injection drug using population.

Transferability or applicability refers to whether the findings can be applied to other contexts. The unique characteristics of the small sample size were described to allow others to determine the applicability of the findings to individuals in similar circumstances. The findings may have limited transferability to other injection drug using populations. However, the insights from this study provide important directions for future research on resilience as it relates to illicit injection drug use. Dependability or consistency is used to evaluate whether the study findings could be duplicated or similar in similar contexts. Although an audit trail of questions, decisions, insights and

personal biases and assumptions was kept, it is noted by Morse and Field (1995) that qualitative research focuses on the uniqueness of human experience and that variation, not repetition, is to be expected.

Confirmability, or neutrality, is concerned with freedom from, or at minimum awareness of, biases and assumptions and maintaining research objectivity. A personal diary was kept to document and increase awareness of the researcher's biases and assumptions. In addition, all possible explanations of the data were explored and negative cases were sought.

Ethical Considerations

The original study was approved by the Capital Health Region (Victoria, British Columbia) Research Review and Ethical Approval Committee and informed consent was obtained from all participants. The signed consent stipulated that the typed transcripts and notes obtained in the study would be retained for educational and future research purposes with the understanding that any additional research projects that use the transcriptions would be approved by the appropriate research and ethics committees. Approval of the University of British Columbia Research Review and Ethical Approval Committee was obtained for this study.

Participants were given written information summarizing the purpose of the study and informing them that their participation was voluntary and that they could withdraw from the study at any time without suffering any negative consequences. The names and contact numbers of the principal investigators were also given to participants for any future questions or complaints. A numerical coding system was used to protect the identity of participants. All interviews, except one where permission was denied, were

audiotaped and transcribed in full with all identifiers removed. Audiotapes were destroyed on completion of the original study and transcripts kept in a computer with a password or in a locked storage cabinet. In this study, interviews and all documents containing data or other confidential information were stored in the same secured manner.

Chapter 4

Findings

Introduction

The purpose of this study was to gain a better understanding of resilience from the perspective of those who use illicit injection drugs. To contextualize the findings, this chapter begins with a description of the conditions in which the participants who used illicit injection drugs lived. Unless otherwise indicated, "participants" refers to the illicit injection drug user group. Next, the experiences of these participants that are associated with a change in the level of their resilience are discussed. The service provider data extends the understanding of these experiences, many of which have been discussed in a different context in earlier publications based on this data (Stajduhar et al., 2001, 2004).

In this study, Horowitz's (1987) conceptualization of resilience as a relative and dynamic process provided a lens with which to frame the analysis. The participants spoke of experiences in their lives that involved behavioural and attitudinal changes around their drug use. Participant's descriptions of changes in their lives that influenced drug use were used as a starting point for the analysis. Behavioural and attitudinal changes related to quitting drug use, decreasing drug use, safer drug use and support seeking were viewed as signs of increasing resilience, while behavioural and attitudinal changes related to the initiation of drug use, increased drug use, unsafe drug use and relapse were interpreted as signs of decreasing resilience.

Social Context of Drug Use and Resilience

The social environment, including poverty, stigmatization and marginalization, in which the participants lived has been described in previous publications (Stajduhar et al., 2001, 2004). However, a brief overview is necessary to put the findings of this study into context. The participants of this study lived in Victoria, British Columbia a small, urban, seaside city with a mild climate and a population, including outlying areas, of approximately 325,000. The illicit injection drug using population of Greater Victoria, at the time of the study, was estimated to be1500 to 2000 (Capital Health Region, 2000).

In the original study the participants reported that their lives centred on maintaining their drug habit. The average daily drug cost of their addiction ranged from $100 to $200. Nine of the 41 participants received government disability benefits and less than half received social assistance benefits. Panhandling and criminal activity such as petty theft, sex trade work and drug dealing were reported as major sources of income. The daily cycle of accumulating enough money to pay for their drugs, connecting with a drug dealer and purchasing and using drugs exhausted most of the financial, physical and emotional resources of the participants. Basic needs of shelter, nutrition, medical care and meaningful human contact with family and friends were, for the most part, unmet due to the unrelenting cycle of addiction.

As almost all of their financial resources went towards purchasing illicit drugs, most of the participants lived in conditions of poverty. In the three months prior to the study, 33 of the 41 participants reported living in unstable housing such as shelters, squats and friend's apartments. Living on the street for intermittent periods was also common. Service providers spoke of the underlying issues of addiction such as

poverty, under-housing, unemployment, malnutrition, lack of education and job skills and psychiatric illness and other medical problems.

Although over half of the participants reported spending most of their time in the downtown area, illicit injection drug use was reported to occur in multiple locations throughout Greater Victoria. A particular concern was drug use in public areas such as parks, alleys and public washrooms (Stajduhar et al., 2000). The interview, observation and geo mapping data of the primary study all suggested that there were too few services for those who used illicit injection drugs and that those services that did exist had serious access barriers due to location, waiting lists and abstinence based programs (Stajduhar et al., 2000). For example, 12 of the 41 participants reported that in the 12 months prior to the study they had tried to access detoxification services but were unable to due to long waiting lists. In addition, the participants reported that they were frequently treated in a judgemental manner, both generally in the community and specifically when they sought health care and that this often had the effect of precipitating additional drug use and decreasing healthcare seeking behaviour. As one long term drug user stated, "as soon as ... some people ... find out I use drugs, an IV user ... they treat me like I'm a different person, like I'm shit".

The participants of this study lived in poverty, were alienated and marginalized from main stream society and lacked access to the basic health determinants, including health care, while they attempted to deal with a powerful addiction. An appreciation of these difficult circumstances is essential to understanding the experiences they describe.

Participants described two types of experiences that were associated with an increase in resilience and one type of experience that was associated with a decrease in resilience (see Table 2).

Table 2. Participant experiences associated with a change in resilience

Participant Experiences Associated With Increased Resilience	Getting to the Point of Change • recognizing its not worth it • getting scared • recognizing an inner desire to quit Envisioning a better future
Participant Experiences Associated With Decreased Resilience	Needing to dull the pain

All of the participants described experiencing at least one type of these experiences and most participants described experiencing more than one type.

Experiences Associated With Increased Resilience

In this section, a discussion of the findings focuses on the ways in which the participants constructed their experiences that led to abstinence from drug use, decreased drug use, safer drug use or support seeking. Many of the participants also reported attitudinal changes in that they were "seriously trying to quit" "or felt "now it's time to get clean". From a harm reduction perspective, the participants reporting these experiences had made positive change.

Getting to a point of change was the first step for some participants, as one female participant explained, "I'm just to the point where I want to get more things going on in my life, more positive things". The experiences associated with positive change

and the ways in which they helped the participants begin to re-organize their lives are described below.

Getting To The Point of Change

As several participants reconstructed their experiences, they described a variety of situations that got them to the point of evaluating their lifestyle and recognizing that they could no longer continue to use drugs in the way that they had been. Motivated by these self revelations individuals began to take steps to address their drug misuse. The participants described experiences that "got them to the point" of making changes in their lives including, "Recognizing It's Not Worth It", "Getting Scared", "Recognizing an Inner Desire To Quit" and "Reaching Out For Support".

Recognizing it's not worth it.

Some of the participants recalled coming to the point where they had to admit to themselves that their drug use was just not worth it. Participants described consciously weighing the negative aspects of maintaining a drug habit and the benefits drug use brought to their lives. There was considerable variation in what was considered too high a cost and the length of time the decision-making process took. However, drawing on past experiences, these participants came to the conclusion that some costs associated with continued drug use were too high a price to pay. In particular, the participants drew attention to the personal costs of jail time, the hardships of street life, apprehension of one's children and remorse for harm done to others. It was not unusual for an individual participant to report that they had more than one of these experiences.

One male participant, who had continued to use injection drugs while incarcerated, reported that four months before he was due to be released from the correctional facility where he was completing his second, four-year term for drug trafficking he began to think about his future. He realized that if he kept using and dealing drugs he would probably have to face another prison term and, concluding that this was too high a price to pay, he found the motivation to quit all illicit drug related activity. At the time of the interview this participant had been out of prison for three years and was on a methadone program. He had one relapse one year after his release from prison but had not used any illicit drugs for the two years previous to the interview.

The ongoing need for financial resources to pay for the next "fix" drove many of the participants into situations that exposed them to physical and emotional hardships. After 12 years of living for the 'high' that drugs could give her, one female participant considered the risks associated with panhandling and sex trade work to support her habit and came to realize that "it wasn't worth it". Although after making the decision to quit, she had several relapses into cocaine use, at the time of the interview, this participant proudly reported that she had not used cocaine for three years. However, recognizing that the costs of continued drug use outweighed the benefits drugs provided did not always result in long-term abstinence. Another female participant, whose re-evaluation of the costs of her drug habit was precipitated by having her children apprehended by Social Services, described deciding to quit drugs then suffering repeated relapses. She did, however, explain that losing her children initiated a series of attempts to quit drug use and her drug habit was never as out of control as

before this point in her life. At the time of the interview, this participant reported that it had taken her three years to get to the point where she mainly smoked and rarely injected cocaine. She had not regained custody of her children.

All of the participants spoke of the personal "costs" associated with drug use but only one, who stated he had been involved in selling drugs, expressed remorse for the harm done to others. This male participant, who had originally sought support at an inner city agency and then became a volunteer there, reported that seeing the plight of his former drug-seeking customers was a constant reminder of the harm he had done to others and helped him continue to abstain from illicit drug use.

Speaking of how those who use illicit injection drugs come to a point in their lives where they start to re-evaluate their drug use, a service provider described two factors that appear to be important 1) witnessing the negative consequences of drug use in others, and 2) becoming tired of dealing with the personal consequences of drug use. The time lapse between initial drug use and becoming ready to re-evaluate the consequences varied for many of the participants. Most of the participants that had made positive changes had used drugs for over ten years before they reached this point, however, two of the female participants, aged 16 and 19 at the time of the study, used drugs for only two years before they reached the point where they were ready to seek treatment.

Getting scared.

Many of the participants described experiences of achieving abstinence, decreased drug use, safer drug use and support seeking that appeared to be motivated by getting scared. There was considerable variation in the frightening experiences that

the participants described and most of them reported having multiple fears that included being afraid of dangerous drugs and drug combinations, negative consequences of drug use to their health, including death, negative consequences of drug use to their physical appearance, memory "blackouts" and relapse. These fears appeared to be important catalysts in finding the strength to move toward more positive health behaviours.

Sometimes experiences of fear were unexpected. One female participant reported that she became fearful for her health when she looked in a mirror and saw her facial acne and how much weight she had lost. Her fears were reinforced by seeing the scabs, abscesses, acne and weight loss of her drug using friends. Motivated by these fears this female participant, with a history of three years of heavy injection cocaine use, greatly reduced the amount of cocaine she used and also changed from injecting to mainly smoking. From a harm reduction perspective reduced drug use and smoking the same substance instead of injecting it is seen as a positive change.

The fear of relapsing and the loss of gains already made in overcoming the addiction appeared to also be associated with positive change for some participants. One female participant who had made strong gains in stabilizing her life reported that being frightened of relapsing strengthened her resolve to stay away from injection drug use:

> I know it wouldn't take much. If you do start using, then you'll start craving it and that scares me...the thought will cross my mind ... And I just think "No." It's not worth it ... I don't want to let myself down.

Sometimes the warnings of friends of the participant raised additional fears. One female participant who was already fearful about weight loss and losing her apartment reported that her friends kept telling her she was going to die if she kept on injecting drugs. Fear of dying, added to her other fears, motivated her to enter a detoxification facility. Some of the participants reported fearing for others as well as themselves. For example, one male participant, who was on a methadone program but experiencing relapses, reported that he was extremely fearful for the health of his wife, who also used illicit drugs, and that this had motivated him to begin the process of quitting drug use. Support seeking behaviour was also associated with being frightened. One female participant, who was not injecting drugs at the time of the study interview, described being extremely frightened after friends told her she had been missing for a number of days and realizing she had no memory of where she had been or what she had been doing. This participant was motivated by this experience to move to a different city where she had friends who did not use drugs and seek community supports as well as medical help for home detoxification.

Data from the service provider interviews supported the participant reports that being scared often precipitated support seeking. The service providers said that their clients frequently reported that they had sought support services because they became desperately frightened due to losing or spending all their money, pawning or selling all their possessions or because they had legal charges pending. One service provider talked about using the fear for personal safety to attract youth into treatment stating, "The biggest carrot is often safety, just plain safety. Their lives are very

perilous, very unsafe, and sometimes if you can just offer a safe place away from the predators and the streets, they'll grab onto that."

Recognizing an inner desire to quit.

Some of the participants were convinced that a genuine "inner" desire to quit drug use must be present before they are able to benefit from external support or influences. One participant who had been through a drug treatment program three times with no apparent effect but who eventually had greatly reduced her drug use and stabilized her life, apparently without outside support, stated that nothing could have been done differently that would have helped her control her drug use sooner:

> Because it's all on the inside ... And when I did finally quit I didn't need to go to treatment ... when you want to quit you'll do it. And if you don't want to quit I don't care where they send you and for how long you're not going to quit. It all comes from inside.

Another participant who highlighted the importance of the decision to quit indicated that for her this involved deciding that she needed to stop and that she would be "OK" if she did stop. The fear of not being able to cope with life after quitting drug use has been discussed in an earlier publication based on this data (Stajduhar, et al., 2000). The participants reported that when they quit drugs they had to face the reasons they started using in the first place as well as the harm they had done to themselves and to others during their drug use. Although the data for this category was limited, some of the participants strongly believed that the personal decision to quit drug use was a key point in being able to successfully follow through on the decision to quit.

Reaching out for support.

The realization of some of the participants that they needed help to deal with their addiction was another mark of beginning to making positive changes that reflected increased resilience. This realization led individuals to seek support from many sources including community agencies, medical services, street nurses, inpatient and outpatient detoxification services, treatment, recovery and methadone programs, supported housing and counselling and psychiatric services. In contrast, the participants who were not at a point in their lives where they were contemplating positive change tended not to seek support for even their basic medical needs:

> My whole time is locked up getting coin together. I've got a lot of health issues myself that need to be dealt with and I can't just get around to it right now and I can't see it getting any better until I can kick [drugs].

For those participants who sought support, being treated as a valuable human became a catalyst for change. Relationships of trust, in particular, were attributed great value by the participants. They described special individuals who they felt they could turn to because that person knew them well, was non-judgemental, and would go to great lengths to help them on an ongoing basis. These kinds of relationships sometimes grew out of contacts with their medical practitioner, other times it was their methadone doctor or an outreach nurse or a staff member at a community agency.

Many of the participants sought community supports that had a spiritual component but it is not clear from the data that it was the spiritual component that attracted or helped them or the non-spiritual supportive services that were offered.

There were no apparent access barriers to those who did not have similar beliefs or did not want to be involved in religious or spiritual activities.

A warm supportive family environment and an interested and involved parent are reported in the literature to be protective factors that bolster resilience (Garmezy, 1991; Werner & Johnson, 2004). Family support was mentioned much less frequently by the study participants than community support was, however, some participants reported that they did access family support. A teenage participant described the positive effect the continued involvement of her family in her life had stating, "For me the difference between using and not using is having them [her family] in my life." Service providers agreed that family support was very important and that family members often provided the resources, energy and motivation to deal with the addiction and that, generally, youth who could maintain contact with their family were better off than youth who did not have contact with their family. The importance of family was illustrated by one adult female participant who did not have family support when she first decided to abstain from drug use. This participant knew she needed some thing to care for and constructed a pseudo family situation for herself, "I got myself a kitten, and clung to her ... she was my reason for staying clean, because if I started using again I would end up losing her."

The ways of "getting to the point" of making change that have been discussed describe how some of the participants constructed their ability to marshal the strength and help they needed to begin the long road to abstaining or safer drug use. Other participants described wanting more, not only to control or escape their addiction but also to realize a better future.

Envisioning A Better Future

Another way that some participants constructed their experiences that appeared to be associated with an increase in resilience was reflected in the category of "Envisioning A Better Future". As one male participant stated, "I fucked up for 30 years of my life ... let's try and make the next 30 better than the last 30." Two female participants were able to articulate a specific future goal, which was finishing high school. Both of these participants had started drug use in their mid teens and after being involved for only a few years had taken significant steps to either stop or almost stop their drug use. One of these participants described her vision of being an outreach worker after completing high school. Other participants, while apparently lacking specific goals, expressed a general vision of a different, more positive life. As one participant stated, "I want to get more things going on in my life, more positive things."

Unlike the conceptualization of cognitive transformation described by Tebes et al. (2004), the participants in this study continued to see their past experiences as negative. However, for some of the participants wanting more from life appeared to be associated with arriving at a new acceptance of self. One male participant, on methadone at the time of the interview, stated he wanted to change his life around and that, "There isn't a day that I've woken up and said, Oh I'm happy that I'm an addict. The fact is that I am an addict. So I have to deal with that".

The service provider data supported the view that having a vision of the future and goals to work towards was associated with positive behavioural change in the injection drug using population. They encouraged their clients even while still actively using drugs to find a vision of the future and goals to work towards. One service

provider described the successes achieved in enhancing work readiness and self-esteem by having individuals still actively involved in their addiction volunteer to work in an inner city lunch program.

Some of the participants described attitudinal and behavioural changes that involved new hope for a different and better future, a new vision of themselves as non-drug users and for a few, specific goals for the future. These changes may be viewed as similar to the transformative changes described by Tebes et al. (2004) and be seen as indicative of an increase in resilience.

Experiences Associated With Decreased Resilience

Although most participants described experiences associated with both increases and decreases in resilience, a few participants described only experiences associated with decreases in resilience. These participants were focused on the many types of pain in their past and current life and their attempts to dull or escape the pain of their existence. Their feelings of hopelessness were a chief characteristic of their stories. These experiences were captured under the category "Needing To Dull The Pain".

Needing To Dull The Pain

Experiences of pain appeared to increase the vulnerability of some participants to initiation of drug use, continued drug use, unsafe drug use practices and relapse. Although there were many sources of physical pain associated with injection drug use (systemic infections, local abscesses, exposure to inclement weather, beatings) the primary source of pain described by participants was emotional, including feeling hopeless that their lives would ever improve.

The emotional pain described by the participants arose from a variety of traumatic experiences. One major source reported by participants was a history of childhood sexual abuse. Some of the participants told horrific stories of long-term abuse and being introduced into the sex trade and the drug world by their parents. Another source of pain that emerged from the data was untreated mental health problems. The service providers reported that a large number of their clients were particularly vulnerable to addiction due to mental health issues, including depression and foetal alcohol syndrome. Feelings of alienation from both family and community were also a frequently reported source of emotional pain. A lack of hope that their lives could improve permeated the stories of these participants.

The participants reported using illicit drugs in order to dull the emotional pain of past and ongoing physical, emotional and sexual abuse as well as the feeling of never belonging or being a part of any community. Unfortunately, using illicit drugs to ease the pain appeared to lead the participants into street life and sex trade work and an escalating need to self-medicate. In fact, as one service provider described, it appeared to make their lives worse:

> They just want to feel loved and they want to feel a part of and they want to feel like they're good enough for something. So, I think to gain that feeling they will put themselves at risk in other ways ... to feel good ... they will give something up and that could be their safety, that could be being so loaded that they just don't care. They'll do another hit with somebody's needle or they'll sleep with somebody or whatever.

Another source of pain was the emotional trauma that occurred while incarcerated. Many of the participants had served sentences in correctional facilities. A service provider stated that many of the inmates do not have the coping mechanisms to deal with this trauma and so they, "go into prison, never done heroin before, but when they come out they're addicted".

Some of the participants spoke of controlling their drug use at a minimal level for extended periods of time or quitting drug use completely until an unexpected adverse event, such as a depression or incarceration, occurred. Without adequate coping skills, these events left them vulnerable to drug use. One female participant explained that she would be more likely to relapse if "life is going down, it's shitty [and] you have no where to live or nothing's happening". Another female participant said that she returned to drugs when her boyfriend went to jail. Even long-term abstinence could be undermined by an adverse event, as was the case with one male participant who was drug free for five years before relapsing after taking pain medication for a back injury.

The service providers stated that becoming addicted was associated with both the addictive quality of the drug used and a lack of personal resources and supports to keep the drug use under control. Many service providers postulated that the pain of low self-esteem was the key issue that increased vulnerability to addiction. One service provider explained:

> If you don't feel very good about yourself, you just don't bother taking care of yourself. If you don't believe you deserve to take care of yourself. There's no purpose for tomorrow. It doesn't matter. It can't get any worse.

Summary

The primary aim of this secondary study was to describe resilience from the perspective of those who use illicit injection drugs. Interviews with individuals who used illicit injection drugs served as a primary source, and where applicable, interview data from service providers was used to complement data obtained from the IDU interviews. Two types of participant experiences were associated with an increase in resilience, "Getting To The Point" and "Envisioning A Better Future". The participants reported experiences of getting to the point of making positive change in the following ways, "Recognizing It's Not Worth It", "Getting Scared", Recognizing An Inner Desire To Quit" and "Reaching Out For Support". "Needing To Dull the Pain" of both the past and the present and an absence of hope for the future was associated with a decrease in resilience. The first two types of experiences were associated with support seeking and quitting, decreasing and safer drug use while the third type of experience was associated with initial drug use, continued drug use, unsafe drug use and relapse. By conceptualizing these efforts as part of the process of increasing or decreasing resilience, analysis of the data resulted in increased knowledge of the participants' experiences that could be linked to changes in resilience.

CHAPTER 5

Discussion

To my knowledge this was the first study to explore resilience from the perspective of individuals who inject illicit drugs. Key findings included ways that individuals constructed their experiences that led them to marshalling the strength and help they needed to begin the long road to quitting, reducing and safer drug use. In contrast, at other times in their lives, the need to address the pain they experienced appeared to increase vulnerability to continued or increased use of drugs, and deter individuals from considering any other option. By conceptualizing these efforts as part of the process of increasing or decreasing resilience, the findings of this study extend the ways in which frameworks of resilience have been applied to this population. In this chapter, I discuss the findings and limitations of the study and the implications for future research.

Resilience In Populations In the Process of Recovery

There are discrepant views in the literature concerning evidence of resilience in populations experiencing problems such as addiction or mental illness (Brown & Kulig, 1996; Miller, 2003; Roisman, 2005; Rutter, 1993; Werner, 1989). The findings of this study lend support to the claim that resilience can be demonstrated in populations who are in the process of recovery (Brown & Kulig; Miller; Roisman). All of the participants in the study spoke of experiences in their lives that involved behavioural and attitudinal changes concerning their drug use that was conceptualized as changes in resilience. Resilience was demonstrated in spite of their struggle with addiction and the difficult

circumstances, including poverty, marginalization, under-housing, unemployment, illness, disease and barriers to health care that characterized their existence.

Resilience As A Dynamic Process

Study findings extend our understanding of resilience as a relative and dynamic process as conceptualized by Horowitz (1987). The concept of multiple points of change in an individual's level of resilience is included in several of the process models of resilience. Horowitz included the concept of "points of reorganization", Rutter (1993) described "key turning points" and Flach (1988) referred to 'bifurcation points'. The findings from this study suggest that there are multiple ways that behavioural and attitudinal changes may influence resiliency. Many of the participants spoke of how they got to the point of making positive changes in their lives that helped them abstain or decrease their drug use, begin to pay attention to their health, or engage in harm reduction strategies, where as at other times individuals talked of difficult times that marked changes that increased their vulnerability to continued drug use. These findings suggest that it may be important to identify individuals who are ready to make changes in their lives and tailor services to either support their efforts to make positive change or decrease their vulnerability to making negative change by providing alternatives to address experiences of pain.

Resilience and A Transformed World View

Participant reports of non-drug related future goals and plans was conceptualized as an indicator of a transformed world view that was indicative of increased resilience. While many of the participants expressed the desire to quit drug use only a few reported future plans and goals that involved a life free of addiction.

These findings are similar to the construct developed by Tebes et al. (2004) in which transformation is viewed as a turning point, marking an altered world view wherein new opportunities are recognized. Unlike the construct of Tebes et al., the participants did not reconstruct their past experiences as positive and growth-promoting. However, participants appeared to gain a new acceptance of themselves and a new sense of their self worth in spite of past mistakes. Several of the multi-stage process models of resilience include a stage that has similarities to these experiences of a transformed world view. The model of Richardson et al. (1990) includes a stage characterized by growth of self-understanding resulting in increased resilience. Rutter's (1993) model includes a third stage of resilience involving an increase in self-esteem and self-efficacy while his fourth stage is characterized by the opening up of new opportunities or a new world view that is indicative of the highest level of resilience. Brown and Kulig's (1996) model includes a second, proactive stage involving positive adaptation and transformation as indicators of not only bouncing back to the former stage of resilience but becoming even more resilient than before.

Protective Factors

The findings of this study suggest that some of the protective factors identified as related to resilience in other populations may also be related to resilience in the illicit injection drug using population. Discussion of protective factors will be divided into the categories of individual, family and community as proposed by Garmezy (1991).

Individual Protective Factors

Twenty-eight protective factors were identified in a review of the literature on resilience (Carbonell et al., 2002; Fine, 1991; Garmazy, 1991; Jacelon, 1997; Masten,

1994; Patterson, 2000; Tusaie and Dyer, 2004; Werner, 1989; Werner & Johnson, 2004; Werner & Smith, 1982). In this study 15 of the 28 protective factors emerged from the stories of participants as being related to experiences that were associated with positive change (see Appendix C). The remaining factors may not have been represented by the participants in the study for a variety of reasons. This may be partially due to the size of the sample but perhaps more importantly the fact that this was a secondary analysis and specific questions about individual protective factors were not asked. It is also possible the remaining protective factors hold less relevance to explaining resiliency among those who inject illicit drugs.

The Individual protective factors of a sense of self worth, a sense of purpose, hopefulness and optimism characterized the stories of those participants who were decreasing their drug use or engaging in harm reduction practices. In the literature on resilience a positive sense of self (Carbonell et al., 2002; Masten, 1994; Patterson, 2000; Sowell et al., 2000; Stein et al., 1998; Werner, 1989; Werner & Smith,1982) hope and a sense of purpose (Werner) and optimism (Carbonell et al.; Masten; Patterson; Werner & Smith) are identified as significant to resilience in adolescents with depression, women who have been diagnosed with HIV, high risk children in young adulthood, adult children of alcoholics and families. Two additional individual protective factors, identified in the literature by Tusaie and Dyer (2004) that emerged from the data of this study were coping strategies and social skills. Barriers to health care services created by the lack of these factors were often apparent and appeared to be related to another protective factor identified by Werner (1989) the ability to elicit a

positive response from others. Findings from this study support previous research that these protective factors are related to resilience.

Family and Community Protective Factors

Although in this study family protective factors were much less evident than community protective factors, findings suggest that both are important as proposed by Garmezy (1991) and Werner (1989) and Werner and Smith (1982). Reasons for the lack of data on family protective factors in this study may be related to the study design and the characteristics of the substance abusing population itself which tend to be alienated from family. Nevertheless, the importance of community or extrafamilial support suggested by Garmezy and Werner as well as Monteith and Ford-Gilboe, (2002) and Tuttle et al. (2004) was suggested in this study by the high value some participants placed on relationships of trust with service providers and how these relationships were related to positive change.

Marsh and Dale (2005) suggest that feeling cut off from the rewards afforded by school, work, personal relationships and other more conventional sources of support appear to increase vulnerability to substance misuse. The findings of this study illustrate the importance of access to community resources as suggested by Werner (1989) and Garmezy (1991) as well as the negative consequences of barriers to community resources.

Resilience and Context Specificity

The findings of this study provide an important beginning to extending understanding of the context specificity of protective factors as described by Johnson and Wiechelt (2004) who stated that resilience should be viewed using a holistic

framework that includes the contexts of age and developmental stage, family history, social class, ethnicity, gender and change over time. For example, an aggressive appearance and manner in the illicit drug using community may elicit the positive response of being left unmolested whereas in the non-drug community it may elicit a negative response creating barriers to service. Alternately, some of the creativity and adaptability developed to survive life on the street may be transferred to non-drug settings. The findings support the recommendation of Johnson and Wiechelt to explore protective factors in specific contexts.

Drug Misuse To Dull Emotional Pain

The findings suggest that many participants use illicit drugs to dull their emotional pain. Although participants reported both physical and emotional pain, the emotional pain caused by past and current sexual, physical and emotional abuse, mental health problems and alienation and marginalization appeared to play a larger role. These findings lend support to previous studies on the relationship of substance misuse to family violence (Heinzer & Krimm, 2002; Martin, 2002), sexual abuse (Brems, Johnson, Neal & Freeman, 2004) mental health problems (Adams et al., 2004; Carbonell et al., 2002; Miller & Chandler, 2002; Public Health Agency, 2005) and marginalization and alienation (van Voorhis, 1998; Zerwekh, 2000). Further, the findings support Hall's (1999) belief in the reality of pain for the marginalized in the postmodern world in which marginalized populations, such as those who use illicit drugs, are without power or voice.

The findings of this study extend understanding of the negative effects of the socioeconomic aspects of addiction that are not within the control of the individual.

Under-housing, unemployment, malnutrition and lack of education and job skills are common issues of people who live in poverty and are marginalized (Ferrar & Palmer, 2004; Rew et al., 2002; Vandu, 2003). The findings indicate these issues not only co-exist with addiction but support Room's (2005) contention that alienation, marginalization and poverty increase vulnerability to substance misuse and need to be factored into health care strategies.

Hope is recognized as a protective factor in the literature on resilience (Aronwitz & Morrison-Beedy, 2004; Werner, 1989), but the findings of this study indicate that many of the participants felt trapped in their addiction with little opportunity of escape. The lives of many of the participants in this study were characterized by illness, disease and encountering barriers to community resources that adversely affected their capacity for positive adaptation to life's challenges. In addition they lacked the voice to have their experiences heard and the power to provide input into political, social and health care policy decisions that concerned their welfare.

Implications of the Study

There are implications for research and for education and practice interventions. Additional research is warranted to increase knowledge of the concept of resilience in the injection drug using population and to determine if protective factors, identified as significant to resilience in the general population, are related to resilience in the injection drug using population. The findings of this secondary analysis demonstrate the potential for a primary study focusing specifically on resilience from the perspective of those individuals who inject illicit substances. As a starting point, researchers could

examine experiences related to getting to the point of positive change that appear to be important from the perspective of individuals who inject illicit drug including 1) observing the harmful effects of illicit drug use on self and on others, 2) fear of the negative consequences of drug use, 3) support seeking, and 4) envisioning a better future for oneself. Additionally, based on the findings of this study there is likely to be benefit in studying in greater depth the negative effects on resilience including 1) drug misuse for the purpose of dulling emotional pain, 2) lack of individual and family protective factors, 3) barriers to community protective factors and the health determinants, and 4) socioeconomic status and associated feelings resulting from alienation, marginalization and hopelessness.

Because resilience is context dependent (Johnson and Wiechelt (2004); Tusaie & Dyer, 2004) sampling frames for future studies should be designed to enable analyses of influencing factors on resilience such as sex, age, developmental stage, family history, socioeconomic status, ethnicity, age of first drug use and time since first drug use. Study samples should also include those who have abstained from drugs for a lengthy period of time to determine what protective factors and processes characterize this group.

Further research is also indicated to increase knowledge of the effectiveness of education and intervention strategies that include fostering of protective factors in those that are involved in substance abuse. All protective factors identified in the literature should be included in future research, however, the findings of this study indicate the need for future research on coping mechanisms, social skills, self esteem, the ability to elicit a positive response from others, sense of purpose, areas of accomplishment,

decreasing feelings of alienation from family and community and facilitating a positive world view.

Further research is indicated to evaluate the effectiveness of educational interventions that include a resilience component. Programs that combine risk and resilience based interventions have been favourably compared to those that are limited to health information programs that focus exclusively on risk (Brown, 2001; Lindenberg et al., 2002). In this study the participants spoke of their experiences of building protective factors such as a sense of purpose and of self-worth, hopefulness, social skills, coping strategies and areas of talent and accomplishment through job training, volunteer and recreational activities that provided experiences for the drug user outside the drug using community.

Limitations

The major limitation of secondary studies is that the original study was not designed to collect information on the secondary research question (Hinds et al., 1997). However, the interview guide of the original study contained questions that focused on protective behaviours relevant to resilience and the study participants were, for the most part, given the opportunity to "tell their story". The principal researcher of this study took part in the original study as a member of the analysis team and as an interviewer for some of the key informant service provider interviews and a facilitator for two of the service provider focus groups. This is both a potential strength because the researcher has special knowledge of the original study that may result in meaningful insights and a potential limitation as the researcher may be biased by her previous experience.

Other possible limitations are connected to the original study. The sample size was relatively small and it is accepted that no age or culture specific comparisons could be made. However, demographic and drug and disease related information collected via the questionnaire were used to describe the sample and to contextualize findings.

The subject matter of the interviews was directly related to behaviours that are illegal and possibly involved feelings of shame and embarrassment. In addition, most of the interviewers were relatively inexperienced. The influence of these factors on the data collected was minimized in several ways. Efforts were made to enhance participant comfort with interviews by using interviewers who were already known and trusted, ensuring that information was kept confidential and removing all identifiers from the transcripts. Interviewers were provided with extensive training emphasizing the importance of a respectful, non-judgemental attitude.

Conclusions

Illicit injection drug use is a daunting health and social problem that calls for a multifaceted response. Resilience-based strategies are proposed as an important adjunct to the current abstinence, law enforcement and risk based policies and interventions that have been developed to address this issue. This study has been the first to explore resilience in the context of injection drug use and supports the contention that resilience is a dynamic process that can be demonstrated in those who are in the process of recovery from addiction. Many of the protective factors identified in the literature as associated with resilience in other populations can also be demonstrated in the context of injection drug use. These protective factors include hope, optimism, a sense of purpose and self-worth, coping strategies, social skills, the

ability to elicit a positive response from others, areas of accomplishment and access to family and community support. Decreased resilience was associated with using illicit drugs to dull the emotional pain caused by physical, sexual and emotional abuse, mental illness, marginalization, alienation, hopelessness and a lack of individual, family and community protective factors. As the findings of this study indicate that the participants who used injection drugs lived in adverse socioeconomic conditions and experienced marginalization and barriers to health services, the coping strategies fostered by resilience-based interventions should include advocacy skills and other means of gaining a voice to have their experiences heard and to influence the social, political, economic and health care policy decisions that effect their lives. Future research using primary data is implicated to increase knowledge of resilience in the context of injection drug use and to evaluate intervention strategies that foster protective factors for the purpose of strengthening resilience in this vulnerable population.

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APPENDICES

APPENDIX A

Interview Guide – Injection Drug User

Note: These questions are to be used as a **guide** only.

Introductory Questions

1. Can you tell me a little bit about yourself?

Elaborating Questions

- Where are you from?
- What is your background?

I would like you to talk a little bit about drug activity.

Context questions

1. Where are the "hot spots" for drug activity?

Elaborating Questions

- What is happening there?
- Why is this area a "hot spot"?
- When are people there (time of day, which days of the week)?
- How do people find out this is a "hot spot"?
- Does being in this area increase people's chance of getting HIV? If so, how come?
- What would make one place less risky than another place?
- Are there places in this area where you think services could/should be set up?

2. Who do you think are the people most at risk?

- What makes them most at risk?
- Where are they from? (e.g. Do they live in Victoria? Do they come from another municipality/city? Do they move between areas?)
- When do you usually shoot up (time of day, etc.)?
- Where do you usually shoot up? (e.g. own home, bar, park, etc.)
- When you shoot up, how do you do it (e.g. alone, with a partner, etc.)?
- Can you demonstrate to me or describe to me how you shoot up?
- What do you think led you to begin injecting drugs?

I am now going to ask you some questions about the risks associated with injection drug use. If you don't feel comfortable answering some of these questions, please don't

hesitate to let me know.

Risk/Consequences Questions

1. What drugs do you commonly inject?

- Why these drugs?
- Where do you get them from?
- Are there other drugs that you use besides that ones that you inject? If so, what are they?
- To what extent is alcohol an issue?

2. What kinds of things do you or others do that place you at risk (e.g. sharing needles)?

Elaborating Questions

- What are some of the reasons that you or others place themselves at risk?
- Where do you get your needles (rigs) from?
- What do you do with your needles (rigs) when you are finished with them?
- How often do you re-use your needles (rigs)?
- How do you clean your needles (rigs)?
- If you don't always clean your needles (rigs), what is the reason for this?
- What would you say to someone who is injecting drugs for the first time?

3. How does where you "hang out" influence whether you put yourself at risk?

- How do the people you hang out with influence your risk behaviours?
- Are there some groups that have higher levels of risk behaviour (e.g. youth, Aboriginal people, etc.)? Is so, which groups and why?
- Are there times when the risks are greater than others? If so, why?
- What needs to happen to help reduce the risks?

4. What do you know about how HIV is transmitted?

5. What kinds of things do you do to protect yourself from being infected?

I just want to finish off the interview by asking you some questions about your experience with health care services.

Intervention Questions

1. What kinds of services do you use? (e.g. SOS, Detox, etc.)?

Elaborating Questions

- To what extent are they working?
- Are there any gaps in the services or interventions? If so, what are they?
- What is your experience in getting into and using prevention, treatment and care services?
- How would you describe your relationship with health care providers (e.g. doctors, nurses, emergency department, etc.)?

2. If you could change any health services available to injection drug users, what would this "wish list" look like?

3. What kinds of things get in the way of putting services in place for injection drug users?

Elaborating Questions

- What advice could you give for overcoming these obstacles?
- Do you have anything to add that we haven't talked about or any questions for me?

Closing Statement

I would like to thank you again for taking the time to participate in this study. Your input is valued and integral for the well-being of our community and will help provide us with important information to develop a plan to help injection drug users.

GIVE PARTICIPANT ENVELOPE WITH $20 INSIDE. HAVE THEM OPEN THE ENVELOPE AND THEN SIGN THE WAIVER THAT THEY HAVE RECEIVED THE MONEY.

IF THERE ARE ANY FOLLOW UP CONCERNS AT ALL PLEASE REFER THEM TO THE STREET NURSES.

Appendix B

Interview Guide – Service Provider

Note: These questions are to be used as a **guide** only.

Introductory Question

1. As a way to begin, I wonder if you could tell me a little about the services your organization provides for injection drug users?

Elaborating Questions

- Who are the clients you primarily serve (e.g. youth, adults, etc.)?
- What do you know about these clients (e.g. whether they inject drugs)?
- What do you know about the services that these clients use (e.g. access to methadone or other harm reduction services, alcohol and drug services, medical care, etc.)?

Context Questions

1. Where are the "hot spots" for drug activity? (If the person is willing, you may provide a map to them and ask them to map it out)

Elaborating Questions

- What is happening there?
- Why is this area a "hot spot"?
- When are people there? (time of day, which days of the week)
- How do people find out that this is a "hot spot"?
- How does being in these areas increase people's chances of getting HIV infection?
- What makes one place less risky than others?
- How does this setting (hot spot) influence risk behaviour?
- Are there places in this setting where services could/should be set up?

2. Who are the people most at risk?

Elaborating Questions

- What makes them most at risk?
- Where are they from (e.g. Do they live in Victoria? Do they come from another municipality/city? Do they move between areas?)?
- When are they commonly partaking in risk behaviours (time of day, etc.)?
- Where do people usually shoot up (e.g. own home, bar, park, etc.)?
- When people shoot up, how do they do it (e.g. alone, with a partner, etc.)?

- Why do you think people start injecting drugs?

3. What kinds of things might help people to inject more safely?

I am now going to ask you some questions about the risks associated with injection drug use. If you don't feel comfortable answering some of these questions please don't hesitate to let me know.

Risk/Consequences Questions

1. What drugs are commonly being injected?

Elaborating Questions

- Why are these drugs commonly injected?
- Where do people get them from?
- Are there other drugs besides injection drugs that are being used by people? If so, what are they?
- To what extent is alcohol an issue?

2. What kinds of things are people doing specifically that place them at risk?

Elaborating Questions

- What are some of the reasons why people put themselves at risk?
- Where do people get their needles from?
- What do you think people do with their needles once they are used?
- How often do you think people re-use their needles?
- How often do you think people clean their needles?
- If people don't use clean needles, why is this so?

3. To what extent do social settings influence the risk behaviours of injection drug users?

Elaborating Questions

- How do social norms influence risk behaviours?
- Do particular groups have higher levels of risk behaviour? If so, which groups and why?
- Are there times when the risks are greater than others? If so, why?
- What needs to happen to help reduce the risks?

4. What level of knowledge do you think people have in general about HIV transmission?

5. What do people do specifically to protect themselves from being infected?

Elaborating Questions

- How do people protect themselves from harm?
- How do they take care of themselves?

I just want to finish off the interview by asking you some questions about your knowledge of the health services available for injection drug users.

Intervention Questions

1. Besides services that your organization provides, what else is available to serve injection drug users?

Elaborating Questions

- To what extent are they adequate and effective?
- Are there any gaps in the services or interventions? If so, what are they?
- What do you think injection drug users' experiences are in accessing and utilizing prevention, treatment and care services?
- How would you describe the relationship that most injection drug users have with health service providers?

2. If you could change or expand any health services available to injection drug users, what would this look like?

Elaborating Questions

- If you could change them, what would you do?
- If you could expand them, what would you do?

3. What new interventions are needed to help injection drug users?

4. What are the obstacles to implementing interventions?

Elaborating Questions

- What advice could you give for overcoming these obstacles?

5. Do you have anything to add that we haven't talked about or any questions for me?

As a last question, I wondered whether your organization had any statistics that might help us with our study? If so, are you willing to share those with us? (IF YES, PLEASE GIVE THEM DR. POFFENROTH'S CARD TO CONTACT).

CLOSING STATEMENT

I would like to thank you again for taking the time to participate in this study. Your input is valued and integral for the well-being of our community and will help provide us with important information to develop a plan to help injection drug users.

Appendix C

Protective Factors Associated With Resilience		
	Protective Factors Identified In the Literature	*Analysis For this Study Indicates A Role In Resilience**
	Individual protective factors.	
1	high activity level	
2	the ability to elicit a positive response from others,	*
3	autonomy	
4	adaptability	
5	self-efficacy	
6	hopefulness	*
7	sense of purpose	*
8	areas of talent or accomplishment	*
9	reflectiveness	*
10	optimism	*
11	intelligence	
12	creativity	
13	a belief system that provides existential meaning	
14	a cohesive life narrative	
15	a sense of self-worth	*
16	an appreciation of one's uniqueness and good fortune	
17	coping strategies	*
18	social skills	*
19	female only – physical attractiveness	
	Family protective factors.	
20	a warm supportive, stable environment	*
21	presence of an attentive and caring parent	
22	perceived family connectedness	
	Community protective factors.	
23	extrafamilial support from peers, adults, role models	*
24	school affiliation	*
25	religious faith or church affiliation	
26	access to community resources	*
27	adequate housing	*
28	medium to high socioeconomic status	*

Appendix D

Terms
Abstinence Based Approach to Substance Abuse These are alcohol and drug treatment strategies with an access criterion of abstinence. Pertaining to law enforcement, this approach is designed to decrease the prevalence and incidence of drug use by reducing or eliminating the drug supply and incarcerating both those who sell and those who use illegal substances.
Geo Mapping This is a data collection technique for the purpose of drawing pictorial representations of events and/or activities and their locations. This technique is often used in conjunction with participant observation.
Harm Reduction This is both a philosophical approach and a frontline strategy that focuses on reduction of harm that is associated with a risk such as illicit drug use.
Low Threshold This is a term that is used in the literature, usually in reference to harm reduction strategies, to denote ease of accessibility by clients to services. This is in contrast to abstinence based policies and practices that require abstinence for eligibility to access a service.
Protective Factors This is a key construct in resilience used to denote characteristics of individuals, families or communities that result in decreased vulnerability to a risk.
Protective Processes Within resilience process models, this is a poorly understood context dependent interaction between protective factors and risk factors whose outcome is a decreased vulnerability to risk. Protective processes are thought to vary over time within one individual and also between individuals.
Rapid Assessment Surveys This is a data gathering technique in the form of a questionnaire consisting of a small number of questions (e.g. three to five) that are designed to fill in gaps in research data.
Re-organizational Points This is a term borrowed from Systems Theory that refers to turning points that may be encountered in an individual's life that act as an impetus to change.
Risk Factors This is a biological, developmental or psychosocial event that increases the likelihood of a negative outcome in an individual or group.