

Experiences and Satisfaction with Methadone Maintenance Treatment (MMT) Health
Services: Views from a Small Ontario City

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Abstract

Addiction to opiates is a complex public health issue affecting thousands of Canadians. Methadone Maintenance Treatment (MMT) is considered the gold standard in Canada, and the world, for treating opiate dependence. In the past, Canadian research into opiate addiction and the effectiveness of MMT has mostly focused on larger cities: Toronto, Montreal, and Vancouver. This community based research study employed a mixed method approach to gain understanding of the experiences and satisfaction with MMT and other health services available to opiate users in Belleville, Ontario (population 48,000). Surveys ($N = 53$), focus groups, participant-observation methods and key informant interviews were used to gather data. The results provide an overall picture of the quality of life for opiate users and MMT clients, the quality of care clients receive, and the perceptions of community members regarding MMT. Challenges related to smaller locales are identified along with recommendations for improving MMT health services.

Key Words: methadone, methadone maintenance treatment, opiate addiction, harm reduction

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Table of Contents

CHAPTER 1	1
INTRODUCTION	1
BACKGROUND	3
What are opiates?.....	3
What is Methadone? What is MMT?.....	4
What is Harm Reduction? How does MMT fit with Harm Reduction?	5
Delivery of MMT Services in Ontario.....	6
Delivery of MMT and NEPs in Belleville, Ontario.....	8
Opiate Addiction – The Scope of the Problem	10
Stigma	12
Why should we care?	12
Summary.....	14
CHAPTER 2	17
LITERATURE REVIEW	17
Treatment Strategies Currently Available for Opiate Dependence	17
Controversy Associated with Harm Reduction Approaches to Treatment.....	27
Current Trends in Illicit Use of Opiates in North America	29
Knowledge Gaps and Future Trends	32
Summary.....	35
CHAPTER 3	37
RESEARCH METHODS	37
Research Aims and Objectives	37
Research Questions.....	38
Research Methods: A Community-Based Approach.....	38
Inclusion / Exclusion Criteria – Surveys and Focus Groups	42
Recruitment and Sampling Techniques	42
Research Timelines.....	44
Data Collection	44
QUANTITATIVE DATA COLLECTION.....	45
Development of the Survey Tool.....	45
Administration of the Survey.....	47
QUALITATIVE DATA COLLECTION	48
Data Analysis	50
Validation of Data.....	52
Strengths Associated with the Research Design.....	53
Limitations Associated with the Research Design	54
Summary.....	55

CHAPTER 4	57
QUANTITATIVE RESULTS	57
Sample Population Demographics	57
Opiate Use and Injection Practices	59
Respondents' Experience with Methadone Maintenance Treatment Programs	62
Respondents' Experiences and Satisfaction with MMT Health Services	65
Access to Health Care Services for Respondents	67
Open-ended Survey Questions	71
Summary	72
CHAPTER 5	75
QUALITATIVE RESULTS	75
Focus Group Data Analysis	76
Common Themes Gleaned from Answers to Guiding Questions	79
Key Informant Interviews	89
Summary	92
CHAPTER 6	93
DISCUSSION	93
Study Limitations	98
Recommendations and Future Studies	100
CHAPTER 7	102
CONCLUSION	102
References	105
Appendices	111

List of Tables

Table 1: Sample Population Demographics	58
Table 2: Sample Population Opiate Use	59
Table 3: Respondents' Experiences with MMT Programs	63
Table 4: OAM5 Scale	64
Table 5: Respondents' Experiences and Satisfaction with MMT Health Services	66
Table 6: Respondents' General Rating of Overall Health	68
Table 7: Health Services Accessed for Sickness/Health Problems by Respondents	69
Table 8: Local Health/Social Services Accessed by Respondents: Past 12 Months	69
Table 9: How Important is it that the Following Services are easily Available to You?	70
Table 10: Answers to Open-ended Survey Questions Provided by Respondents	72
Table 11: Guiding Questions and Common Responses by Key Informants	91

List of Appendices

Appendix A: Letter of Support: Injection Drug Use Harm Reduction Task Force	111
Appendix B: Quantitative Survey Tool	112
Appendix C: Sample of Guiding Questions: Focus Group Sessions	123
Appendix D: Sample of Poster: Participation in Survey	124
Appendix E: Sample of Poster: Participation in Focus Group Sessions	125
Appendix F: Letter of Invitation and Informed Consent: Survey	126
Appendix G: Letter of Invitation and Informed Consent: Focus Group Sessions	128
Appendix H: Research Assistant Confidentiality Agreement	130
Appendix I: Focus Group Participant Confidentiality Agreement	131
Appendix J: Transcription Confidentiality Agreement	132
Appendix K: Letter of Informed Consent: Key Informant Interviews	133
Appendix L: Sample of Guiding Questions: Key Informant Interviews	134

CHAPTER 1

INTRODUCTION

Elizabeth is a petite woman in her mid fifties; frail and delicate. You would not know her secret simply by looking at her but Elizabeth is addicted to prescription opiates. Her downward spiral began innocently enough with a legitimate OxyContin prescription from her doctor for pain some two years earlier. Elizabeth never expected to find herself walking into the Belleville Freedom Support Center to complete a survey about opiate addiction and local methadone maintenance treatment services. As with any person who inquired about the survey, Elizabeth was briefly interviewed to verify her qualification for the study. "I can't get the pills from my doctor anymore. If I don't have them, I get really sick. I'm so embarrassed," she says as she wipes away tears. I reach across the table to hold her hand and ask if she has ever considered methadone. Elizabeth does not know a lot about methadone but is adamant that she will not risk being seen entering the methadone clinic situated on the main street. I tell her about the other clinic which is less visible to the public. She did not know there was a second clinic in town and seems very interested in checking it out. I introduce her to the street nurse for further support and information. Elizabeth qualifies for the study. Unfortunately, her story is not unique.

Methadone maintenance treatment (MMT) is a health service that is widely available across the province of Ontario. MMT services exist to assist individuals who are opiate dependant. This thesis explores the experiences and satisfaction with methadone maintenance treatment (MMT) along with other health services in the context of a small Ontario city. The research for this study was conducted in Belleville, Ontario; population approximately 48,000 (Statistics Canada, 2007a). Belleville, Ontario is situated along the 401 corridor between Toronto and Ottawa. Set along Lake Ontario's scenic Bay of Quinte, it is also the gateway to Ontario's Prince Edward County; famous for its many vineyards, artists, and Sandbanks Provincial Park. Belleville serves as the main service hub for many outlying rural towns and villages. Geographical factors limit most forms of affordable public transit to the immediate city limits making access to some essential services challenging for persons who do not own a vehicle or who cannot

drive. Belleville falls within the region of Hastings and Prince Edward Counties (HPEC). HPEC is a vast area covering approximately 155,970 square kilometres (Statistics Canada, 2007b). Many rural towns and villages make up HPEC. These rural, sometimes remote, settings would not likely be associated with substance abuse problems. However, the town of Bancroft, population 3,800, (Statistics Canada, 2007b) recently opened its first needle exchange program (NEP) site with the help of the HPEC Health Unit (Key Informant Interview, 2011).

Addiction to opiates can be so all-consuming that some who become dependent are never again drug free. Attempts to address opiate dependence are supported through treatment programs such as MMT which has been described as a means of managing dependence rather than a cure for addiction (Ontario Ministry of Health and Long-Term Care (MOHLTC), 2007). Through proper control and prescription by a physician, daily doses of oral methadone can prevent cravings for heroin, and other opiates, and limit withdrawal symptoms (MOHLTC, 2007). MMT services can be offered in a variety of settings in conjunction with other health services. Methadone clinics cater specifically to persons with opiate dependency. Based on medical assessments, physicians who are licensed to prescribe methadone for opiate dependency provide MMT services to their patients (College of Physicians and Surgeons of Ontario (CPSO), 2011).

At the time of this study (2010), there were two methadone clinics in Belleville, Ontario. These clinics are for-profit enterprises, operated as a part of franchises of clinics throughout the province. In addition to the two methadone clinics, several pharmacies in the region (Hastings and Prince Edward Counties) dispense prescribed methadone (supervised) to patients receiving MMT. The number of individuals in HPEC who were

receiving methadone for opiate dependence was estimated to be between 300 and 400 people at the time this research was conducted (Key Informant Interview, 2011).

In order to appreciate the health benefits associated with MMT services for both individuals and communities, it is important to first understand opiates, opiate addiction, the challenges and costs related to opiate addiction and the role MMT services play in addressing these issues. The following provides background information on the same and provides some context for these issues as they exist in smaller locales versus larger urban centres.

Background

What are opiates?

Opiates are drugs which originate from the poppy plant. Some opiates, such as heroin, are subjected to chemical change. Those which remain chemically unaltered include opium, morphine, and codeine. In addition to these plant-derived opiates are other commonly prescribed morphine-like drugs including methadone, Demerol, Percocet, and OxyContin to name a few. These drugs are developed in a laboratory and are not derived from the poppy plant in any way. Altogether, this family of pharmaceuticals is referred to as opioids. Opioids, including methadone, have long been used by the medical community as a means to effectively manage acute and chronic pain due to physical trauma (Center for Addiction and Mental Health (CAMH), 2008).

Opiates, such as heroin, produce a sense of euphoria in the user. The effect is short-lived, resulting in the need for several doses of the drug over 24 hours to maintain the desired 'high' and avoid illness associated with withdrawal. Long-time users may suffer severe withdrawal symptoms (dope sickness) when there is too much time between

fixes, or doses, of an opiate. Prolonged usage of opiates may result in increased tolerance and addiction, whereby the user requires the drug on a regular basis in order to function somewhat normally and avoid withdrawal symptoms (CAMH, 2008).

What is Methadone? What is MMT?

Methadone was first discovered in Germany in the 1940s and has been widely used for pain management since World War II. In 1963 the world's first MMT program was established in Vancouver, B.C., based on research conducted in the 1950's by Robert Halliday. Similar research conducted in the United States at that time concluded that methadone not only allowed persons addicted to morphine to withdraw with few side effects, but also their overall quality of life improved. Most important was the realization that individuals no longer craved morphine while receiving methadone (MOHLTC, 2007).

Methadone is a long lasting opiate with few side effects. It acts on specific receptors in the brain to block pain resulting from physical trauma without producing the 'high' or sense of euphoria associated with usage of other opiates, such as heroin or morphine (CAMH, 2008).

MMT has been considered the gold standard for treating opiate addiction worldwide since the 1960's (MOHLTC, 2007). However, this effective replacement treatment strategy does not work for everyone. Some people (10 – 20%) do not respond well to MMT (Canadian Institutes of Health Research (CIHR), 2005). Relapse into addiction is common; often characterized by an inability of some addicts to adhere to replacement therapies. The World Health Organization (WHO) suggests that fewer than 10% of the estimated 16 million illicit opiate users, worldwide, are receiving substitution therapy. In

countries where substitution strategies are available, 40% to 50% of opiate addicts receive some sort of replacement therapy (WHO, 2008).

What is Harm Reduction? How does MMT fit with Harm Reduction?

In the context of drug addiction, harm reduction represents a philosophy of improving the quality of life for individuals and communities through the implementation of supports ranging from controlled use of substances to abstinence (Pauly, Goldstone, McCall, Gold, & Payne, 2007). To date, harm reduction practices have been mostly focused on street outreach programs (street nurses) and inner city clinics. A harm reduction approach addressing addiction to illicit drugs, including opiates, employs strategies such as: Heroin Assisted Treatment (HAT), the establishment of supervised injection sites/facilities (SIF), Needle Exchange Programs (NEP), Methadone Maintenance Treatment (MMT) programs, educational programs to provide knowledge on safer injection practices, the provision of safe crack kits to addicts, and political reform on drug policies (Pauly et al., 2007).

MMT is a replacement therapy strategy whereby patients replace their daily requirement for opiates with a prescribed oral dosage of methadone. In order for MMT to be effective, programs must provide more than just the methadone (CPSO, 2011). According to the CPSO (2011) MMT programs should offer patients a multitude of services through a collaborative approach by a multidisciplinary health team. Specifically, Best Practices would include a patient's access to physicians, nurses, social workers, mental health workers, case managers, peer support, and pharmacists (CPSO, 2011, p. 60). Of these supports, counselling is identified as a key determining factor in the retention and effectiveness of MMT and should be provided even in the absence of

some/all of the other supports mentioned (CPSO, 2011). MMT has been shown to have a positive impact on individuals and communities by: 1) reducing the transmission of blood borne diseases, 2) improving the overall health of patients, 3) reducing crime rates, and most importantly, 4) reducing morbidity and mortality associated with opiate addiction (CPSO, 2011).

Delivery of MMT Services in Ontario

The system for delivering overall health care in Ontario has recently undergone major restructuring. Currently, the province of Ontario is divided into geographical regions referred to as Local Health Integration Networks or LHINs. The provincial information and referral service known as the Drug and Alcohol Registry of Treatment (DART) is funded by Ontario's Ministry of Health and Long Term Care (MOHLTC). In 2007, Ontario's MOHLTC suggested that approximately 16,400 people in Ontario were receiving MMT for opiate addiction (MOHLTC, 2007). Each LHIN reported on the number of persons who were formally referred to MMT programs by DART between January 1, 2006 and December 31, 2006. For example, Hastings and Prince Edward Counties are part of the South East LHIN where 9 people were referred for methadone-related services by DART during this time period (MOHLTC, 2007).

The distribution of methadone, a controlled substance, is regulated at the federal level. Specifically, the drug is regulated under the Controlled Drugs and Substances Act (CDSA) and the Narcotic Control Regulations (MOHLTC, 2007). In order for physicians to legally prescribe methadone, they must receive an exemption from Canadian Law; Section 56 of the Act by Health Canada (MOHLTC, 2007). In 2006, Health Canada granted Ontario physicians and pharmacists an exemption from Canadian law which

allowed them to prescribe and dispense methadone in methadone clinics and pharmacies to treat opiate dependence. This exemption, initially granted on a pilot basis, continues to be granted from Health Canada. Although this process is regulated by the federal government, it is monitored in Ontario by the College of Physicians and Surgeons of Ontario (CPSO). Ontario physicians who prescribe methadone as part of a MMT program cannot do so without completing special requirements specific to the use of methadone for the treatment of addiction versus pain management (CPSO, 2011). MMT may be delivered in a variety of health settings. A number of MMT physicians choose to quietly operate out of their regular general practice, some choose to work for one of the ‘for profit’ chains of clinics that offer MMT throughout the province, while others may choose to offer their services through ‘not for profit’ out-reach centres, hospitals, residential addiction treatment facilities, or Community Health Centers (CHC) (CPSO, 2011). Regardless of the practice setting, MMT physicians must meet the following criteria in order to be granted a methadone exemption: “1) Hold a certificate of registration in Ontario, 2) Be in good standing with the CPSO, 3) Complete an application form and agree to practice in accordance with the CPSO’s expectation document, 4) Complete the Opioid Dependence Treatment Core Course through CAMH, and 5) Complete two days of clinical training with a MMT physician approved by the CPSO” (CPSO, 2011. p. 24). Physicians meeting these requirements are initially exempted for one year with successive exemptions granted every three years (CPSO, 2011).

Delivery of MMT and NEPs in Belleville, Ontario

Although statistical information regarding the total number of persons currently accessing the two methadone clinics in Belleville, Ontario, for MMT is not available, estimates range between 300 and 400 people (Key Informant Interview, 2011). Both clinics are for-profit agencies where clients can be seen by a physician who has met the CPSO requirements necessary to assess opiate users and prescribe methadone to treat opiate dependence. Clients who are accepted into the local MMT programs also receive care from the nursing staff that, among other services, dispense methadone and monitor a patient's daily consumption of their prescribed dose. Patients may also receive their daily methadone at one of several pharmacies who have pharmacists on staff able to dispense the drug and monitor consumption by patients who do not receive carries.

The term, 'carries', refers to a patients' ability to take multiple days worth of their prescribed dose(s) of methadone home with them. Methadone is a powerful synthetic opiate. Ontario has a history of methadone usage by non-MMT clients which has resulted in serious harms and fatalities. As such, methadone is strictly regulated. Once stabilized, some patients may qualify for the option to receive carries. Specific standards and guidelines exist to guide physicians with ascertaining a patient's readiness for carries (CPSO, 2011). The following criteria outlines some of the considerations for providing patients with the option to have carries; (1) after two months of MMT, patients may be considered for carries if they are deemed mentally and physically stable and have demonstrated no other substance use one week prior to receiving their carries. This means that patients are identified as low risk for misuse of their carries (diversion to the streets, overdose, relapse, etc.) and can be trusted to take the dosage(s) as prescribed; (2)

patients must provide evidence that they can safely store their carries at home. This involves patients showing the clinicians the locked box they will use to store their methadone at home; (3) the number of carries prescribed may increase by one every two to four weeks based on the physician's assessment and adherence to carry protocols by the patient (CPSO, 2011). The option for carries alleviates the inconvenience of daily trips to the methadone clinic for patients. However, this practice is somewhat controversial as some methadone is sold illegally on the street. As such, strict monitoring and prescribing policies regarding access to carries are outlined by the CPSO (2011) to help physicians curb the diversion of methadone to the streets. The CPSO standards and guidelines for prescribing carries apply to all physicians who prescribe and dispense methadone to opiate dependent patients in the province of Ontario (CPSO, 2011).

Needle Exchange Programs (NEPs) are available in communities throughout Hastings and Prince Edward Counties. In Belleville, NEPs are offered at designated pharmacies and agencies affiliated with the local health unit. One critical site is located in Belleville's downtown core at the Belleville Freedom Support Center (BFSC). The BFSC is a drop-in center run by the local Mental Health Support Network (MHSN). The community based research for this thesis was conducted largely through the BFSC with support and approval from the local MHSC and the HPEC Injection Drug Use Harm Reduction Task Force (HRTF). The BFSC offers more than just clean needles and works (drug paraphernalia) to injection drug users. It offers a space where opiate users are able to connect and interact with frontline health workers. Some services they may receive include: 1) health care and support from the local street nurse, 2) support and information from a health unit staff nurse who operates the bi-weekly sex health clinic, 3) peer-

counselling and support in a non-judgmental environment, and 4) information about health services, such as MMT, available in the community.

Opiate Addiction – The Scope of the Problem

In 2008, the WHO (2008), reported that an estimated 16 million people, worldwide, were using illicit opiates. Information compiled from a longitudinal OPICAN study states that an estimated 125,000 Canadians were injection drug users (IDUs); with the majority of these injecting cocaine and/or heroin (Fischer, Rehm, Patra, and Firestone-Cruz, 2006). Data regarding trends among opiate users was also gathered. The research indicated the occurrence of significant, ongoing changes in the illicit use of opiates in Canada since the 1990s. Although Vancouver and Montreal remained fairly constant with large numbers of heroin users, prescription opiates were identified as fast becoming the opiate of choice for users in other areas of the country (Fischer et al., 2006a).

For those addicted to opiates, the physical need is so strong that addicts must have the drug to avoid sickness related to withdrawal. Many have stated they will do anything to get it, including committing criminal acts such as theft and prostitution (O'Brien, 2008). Risky behaviours, such as unprotected sex and unsafe injection practices, have been associated with increased harm to both drug users and communities. Unprotected sex may potentially result in the spread of sexually transmitted infections (STIs). Unsafe injection practices such as sharing needles, using un-sterilized needles and other associated injection paraphernalia, and improper disposal of used syringes have the potential to negatively impact IDUs and threaten to expose the general public to serious health risks (Registered Nurses Association of Ontario (RNAO), 2009).

In 2009, the RNAO reported that an estimated 46% of the 30,000 IDUs in Toronto, Ontario, share needles and partake in other unsafe injection practices. Common infectious diseases associated with addicts who are IDUs include HIV and Hepatitis C Virus (HCV) (RNAO, 2009). Illicit drug use has been clearly identified as a key risk factor for HCV infections (Fischer, Kalousek, Rehm, Powis et al., 2006). In 2006, approximately 300,000 Canadians were infected with HCV. Future estimates include 6,000 new cases per year. Of these new cases, 75% will be directly related to illicit drug use (Fischer et al., 2006b). The annual cost associated with HCV-related illness in Canada was estimated to be \$500 million dollars in 2006 with potentially substantial increases forecasted over the next 20 years (Fischer et al., 2006b).

Social determinants of health include, but are not limited to: 1) poverty, 2) economic inequality, 3) social status, 4) education and early life care, 5) social exclusion, 6) social support, 7) employment/job security, and 8) food security (Canadian Nurses Association (CNA), 2005). All of these factors are deemed instrumental in determining the overall health/well-being of individuals and, as such, must be considered while exploring the effectiveness of, and satisfaction with, current health services (including MMT) available to opiate users (RNAO, 2009). Many individuals who enter MMT programs in Ontario struggle with securing the basic necessities of life (RNAO, 2009). Education levels tend to be lower than the average among MMT clients which results in the reduced ability to secure employment that provides an adequate income. Many MMT clients rely on social assistance and poverty is common among illicit opiate users and MMT clients. Specifically, food security, and suitable housing are among the challenges MMT clients on low/fixed incomes face. In many instances, MMT clients are homeless

or close to homeless, and must rely on social supports to supplement groceries (RNAO, 2009).

Stigma

Goffman (1963) identifies stigma as the negative evaluation by others toward an individual, or group of individuals, who deviate in some way from what is considered normal; including their appearance, social/racial associations, or behaviour. Stigma is often associated with drug addiction and is another key issue facing individuals who are opiate dependent (Neale, Nettleton, & Pickering, 2011). Neale, Nettleton, and Pickering (2011) cite a study conducted in the 1908s by Biernacki (1986), who studied heroin users in the United States that had stopped using opiates without any medical assistance. Biernacki was trying to determine the impact of social stigma and an addict's sense of self/identity on their ability to stop using drugs and improve their lives. Biernacki discovered that the existence of social stigmas toward heroin addicts translated into insurmountable barriers for individuals who were trying to quit using drugs. Not only does stigma exist for drug users (including opiate users), but there is also stigma associated with individuals who use MMT (Anstice, Strike, & Brands, 2009). It is therefore, imperative that frontline health workers (doctors, nurses, pharmacists) who interact with MMT clients recognize the potential negative impact of any biases they may have toward drug users and MMT clients (Anstice, Strike, & Brands, 2009).

Why should we care?

Why should we care about opiate addiction and the effectiveness of treatment strategies such as MMT in Canada and, more importantly, our own communities? The answer is multi-faceted. Although opioids, such as heroin and OxyContin, can be snorted

and smoked, a large number of users inject drugs. Many street addicts share needles, or use dirty needles. These practices increase the risk and incidence of blood born diseases such as HCV and HIV (WHO, 2008). Improperly discarded needles used by infected opiate users also expose the general public to risk of disease, making addiction a community problem.

Studies conducted in the 1990's indicated a direct correlation between extremely high rates of HIV and IDUs; especially in communities lacking sufficient and effective prevention efforts or harm reduction strategies (Millson, Challacombe, Villeneuve, Strike et al., 2007). In 2006, the reported rate of overdose in Canada was approximately 500 – 1000 events per year (Fischer, Popova, Rehm, & Ivsins, 2006). Even more shocking was the rate of one death per day in the mid-1990s in Vancouver, BC. Furthermore, the annual mortality rate associated with IDU during this time period was 1-2% for addicts (Fischer et al., 2006c).

Apart from human suffering associated with opiate use, the related social costs are staggering. They include: (1) the arrest and incarcerations of addicts, (2) health care to treat illness related to addiction, and (3) social assistance to support users unable to work and support themselves through legal means. No current dollar values associated with societal costs was located. However, the RNAO (2009) reported that the yearly social costs associated with untreated opiate dependence in Canada in 1999 were an estimated 5.3 million dollars. Finally, in 2006 the estimated yearly personal and societal cost associated with heroin addiction in Canada was \$660 million dollars (MOHLTC, 2007).

Summary

As previously stated, full MMT programs that adhere to Best Practices remain an accepted, effective ‘harm reduction’ approach to the management of opiate addiction in Canada, and abroad (WHO, 2008). For decades, studies have been conducted on the effectiveness of MMT (MOHLTC, 2006). With the majority of Canadian research focused on treatment services in major cities, there is clearly a lack of research targeting rural/urban areas where the incidence of prescription opioid dependency appears to be highest (Fischer, Gittins, & Rehm, 2008). Considering Canada’s unique geography and the number of small cities and towns inside each province, studies focused on MMT services available to users in smaller cities and towns is warranted. Adequate access to MMT has been identified as a significant issue for individuals who live in rural or remote communities (MOHLTC, 2007). Furthermore, the current shift in opiate use and dependence from heroin to prescription opiates makes studies focused on smaller locales even more important. The shift to dependence on prescription opiates means that these drugs are more widely available as geographical considerations (transportation of substances) is less of a concern. The size and location of a community no longer limits the illegal supply and accessibility of opiates (Fischer, Gittins, & Rehm, 2008).

Rural needs, services and attitudes vary significantly from those in larger centres and directly impact care and support available to opiate addicts in smaller locales. Access to treatment is an issue for opiate users living in rural communities. For example, travel to methadone clinics is an issue, especially for those receiving no financial assistance and who are among the poorest in communities. Many MMT clients do not reside in areas where public transit is available. Thus, the cost associated with travel in

order to access clinics is an issue (Taylor Field Notes, 2010). Costs may be incurred directly by clients or the health care system if clients are relying on social assistance to pay for transportation (Key Informant Interview, 2011). For individuals who may receive financial assistance from the government, access to MMT clinics may still depend on the distance they are required to travel to the nearest facility. The standards of care may differ in rural clinics versus city clinics due to isolation and perhaps lack of supports (Taylor Field Notes, 2010). Finally, it may be harder to protect anonymity in small town/rural clinics as individuals may have a greater chance of being recognized by someone they know as they enter a methadone clinic (Taylor Field Notes, 2010). Individuals may experience negative consequences/stigma around being a MMT client and their non-medical drug use.

The following chapter reviews current literature regarding Best Practices for MMT in Ontario, factors related to effective MMT programs, and current trends in opiate use and treatment strategies. The research methods used in this community based research study will be presented along with results from the analysis of the data collected. Results from the following study will contribute to the support of current MMT practices meeting the needs of MMT clients accessing care in Belleville, Ontario, as well as identify areas for improvement. Research findings may be useful to local health professionals, for example, doctors, nurses and pharmacists, and community outreach workers (needle exchange programs, street nurses). Most important is the potential for a positive impact on the lives of those suffering from opiate dependence. Acquiring a better understanding of the effectiveness of current services available in a community provides an opportunity for caregivers and service providers to identify problems and

make necessary improvements. Improved services and care for individuals may increase their chances at a more normal life and provide them with better health care overall.

Finally, a better understanding of MMT as a necessary health care service by health providers and the general public may reduce the stigma associated with opiate dependence and increase compassion of caregivers and community members toward this vulnerable population.

CHAPTER 2

LITERATURE REVIEW

The following literature review presents information on existing treatment options for opiate dependence in Canada and abroad, trends regarding opiate use in Canada and North America, and the current paradigm shift in opiate use and addiction. Articles that focused on harm reduction strategies such as Methadone Maintenance Treatment (MMT) and Heroin Assisted Treatment (HAT), relapse, and alternative approaches to treatment for opiate addiction were reviewed. Searches for relevant data were conducted using the University of Ontario Institute of Technology (UOIT) library databases and online inquiries. This data was limited to peer-reviewed sources of information with a preference for those published no earlier than 2005. It is interesting to note that the majority of documentation from Health Canada was dated 2002 or older.

Treatment Strategies Currently Available for Opiate Dependence

The Harm Reduction Approach

As previously stated in Chapter one, harm reduction strategies have been shown to improve the quality of life for individuals and communities (Pauly, Goldstone, McCall, Gold, & Payne, 2007). MMT has been described as the gold standard for treatment of opiate addiction (WHO, 2008) and is one of several harm reduction strategies currently available to address the problem. Heroin Assisted Treatment (HAT), supervised injection sites/facilities (SIF), and Needle Exchange Programs (NEP) are examples of additional harm reduction approaches that may be available, to some degree, in cities and towns across Canada (Pauly et al., 2007).

HAT and SIF

Heroin Assisted Treatment (HAT) involves the use of medically prescribed heroin for addicts who do not respond favourably to traditional treatments such as MMT. First used in Switzerland in the mid 1990s as part of research programs to address addiction problems, this controversial treatment was shown to be highly effective in reducing illicit drug use in public spaces and associated harms such as poor health and elevated crime rates. Over the course of time, positive public opinion in Switzerland regarding HAT has led to implementation of these programs as part of standardized treatment for heroin addiction that is now policy (Firestone-Cruz, Patra, Fischer, Rehm & Kalousek, 2007).

Canada has yet to adopt a legal policy allowing HAT programs. However, in a progressive attempt to address opiate addiction, two randomized control trials (RCT) using HAT were established in 2005 in Montreal and Vancouver. Originally designed to include five major US cities and two Canadian cities, the North American Opiate Medication Initiative (NAOMI) project was ultimately limited to include only Canada (Oviedo-Joekes, Nosyk, Marsh, Guh, Brissette, Gartry, Krausz, Anis & Schechter, 2009). Funded by the CIHR to the amount of \$8.1 million dollars, the study aimed to evaluate the effectiveness of HAT in a North American context (Oviedo-Joekes et al., 2009).

Current Canadian literature is limited to information regarding the NAOMI projects' study design and limitations. Oviedo-Joekes et al. (2009) identify the main aims of the Canadian trials as: 1) the affect on retention in treatment at one year and 2) the affect on reduced crime and illicit drug use in the target population after randomization into groups receiving/not receiving DAM (prescription heroin). The involvement of a double-blind component in the study set the NAOMI project apart from

European trials. The successful recruitment of subjects was attributed to the involvement of street outreach workers who interacted with addicts on a regular basis. Needless to say, any RCTs involving the use of illegal drugs in a marginalized population face unique challenges and are highly controversial. Oviedo-Joekes et al. (2009) suggest that ethical, moral and political considerations highly influence the design of research studies involving vulnerable, stigmatized populations. Upon evaluation of the design and implementation of the NAOMI study, the authors conclude that similar rigorous trials in the future are needed to provide quality information around alternative treatments for severe heroin addiction in Canada and around the world.

Supervised Injection Facilities (SIFs) provide addicts with a safe, medically supervised, clean, space to inject their drug (Firestone-Cruz et al., 2007). Similar to HAT, SIFs were first established in Switzerland, Netherlands, and Germany in the early 1990s where the strategy was shown to reduce public disturbances and crime rates. Originally established illegally, public resistance abated over time, resulting in the acceptance of SIFs as a standard means of addiction treatment practice (Firestone-Cruz et al., 2007).

This somewhat controversial harm reduction strategy has also been introduced to communities in Australia and Canada. Vancouver, British Columbia, Canada established North America's first, and only, SIF (INSITE) in 2003. In fact, the Vancouver mayoral election in 2003 was decided on the issue of establishing the facility. Despite the three-year term outlined for the facility, INSITE continues to operate at full capacity. Unlike European initiatives, politics surrounding the issue in Australia and Canada remains highly controversial. Public and governmental support is mixed. Interestingly, any

increases in public support for this strategy have been directly linked to perceptions that reduced crime rates and public disturbances are the result of established SIFs (Firestone-Cruz et al., 2007).

Kerr, Stoltz, Tyndall, Li, Zhang, Montaner, and Wood (2006) conducted a before and after study in response to high rates of HIV infections among IDUs worldwide and death rates attributed to overdose despite the availability of NEPs and MMT. Public concern regarding the perception of increased drug use upon the establishment of SIFs was a main consideration. The researchers recruited IDUs ($N = 871$) residing in Vancouver, BC. Outcomes were measured based on the rates of relapse and abstinence by former/current IDUs. The rates were analyzed prior to the opening of Vancouver's SIF. This data was then compared to information gathered after the facility was established. Results of the study indicated no increase in overall illicit drug use by IDUs with the establishment of a SIF despite some public perception to the contrary. In fact, findings by Kerr et al. (2006) are consistent with other studies on the impact of SIFs. The establishment of INSITE is shown to have improved public order and reduced needle sharing in Vancouver and relapses by former IDUs did not increase (Kerr et al., 2006).

Stoltz, Wood, Small, Li, Tyndall, Zhang, Montaner, and Kerr (2007) conducted a comparative research study to determine if the establishment of INSITE in Vancouver, Canada had any effect on injecting practices; specifically needle sharing. The representative sample consisted of 760 IDUs accessing INSITE. Subjects were randomly recruited; providing blood samples at baseline and a 6-month follow-up. The researchers compared consistent and non-consistent use of the facility with injection practices as self-reported by the research subjects. Findings indicated improved injection and needle

disposal practices were associated with consistent use of INSITE. Reduced rates of soft tissue infections were also identified. This information is important as research conducted by Stoltz et al. (2006) identified soft tissue infections as being responsible for the majority of Emergency Room (ER) visits by IDUs in Vancouver, Canada. As with similar studies, a reduction in public injection practices and overdose rates was observed (Bayoumi & Zaric, 2008).

Firestone-Cruz et al. (2007) examined public opinion toward SIFs and HAT in Ontario, Canada. Based on data collected from the 2003 Center for Addiction and Mental Health (CAMH) Monitor to gain understanding of public opinions on the establishment of HAT and SIF in Ontario, Canada, the authors argue that political decisions are based largely on public opinion of important matters; suggesting public opinion weights heavily on longevity of public programs – including SIFs and HAT. The CAMH Monitor is an on-going cross-sectional telephone-based survey of Ontario adults conducted by CAMH targeting trends in alcohol, tobacco, other drug use and opinions regarding drug policies, mental health and gambling. Subjects received four core statements regarding HAT and four regarding SIF to which they were to respond. Analysis of the data provided by the representative sample of Ontario adults showed support for both SIF and HAT for treating opiate addiction. This was especially evident in respondents with post secondary education and those who viewed addicts as ill persons in need of health care. Furthermore, the authors shared information on a recent survey of Canadians ($N = 1,407$) conducted by Decima Research where 56% were in favour of establishing SIFs in Canada. In contrast, 45% believed punishment under the law for use

of illicit drugs was the best approach versus 52% who were opposed (Firestone-Cruz et al., 2007).

The establishment of SIFs provides addicts with clean needles and materials necessary for safe injection. This harm reduction strategy has been shown to reduce: the frequency of shared needles among addicts, the amount of discarded needles ending up in public areas, health risks associated with exposure to blood borne diseases, rates of HIV and HVC infections, and overall deaths from overdose (Bayoumi & Zaric, 2008). SIFs provide addicts with increased levels of interaction with health care workers; encouraging access to physical and mental health services (Firestone-Cruz et al., 2007).

NEPs

Needle Exchange Programs (NEPs) are among the most prevalent harm reduction strategies available in Canada (Leshner, 2008). This public health approach reduces blood-borne diseases (HIV/ AIDS, hepatitis) associated with unclean intravenous drug use practices, such as sharing needles and improper disposal of used needles. The most effective NEPs are those providing services beyond needle exchange, including encouragement to enter treatment programs and/or seek additional care for physical and mental health issues (Leshner, 2008).

MMT and Buprenorphine Replacement Therapy

Methadone has been used to treat withdrawal symptoms related to heroin addiction, and other opiates, since the 1940s (MOHLTC, 2007). Canadian researcher Robert Halliday established what some consider the world's first MMT program in Vancouver, B.C. in 1963. Research in the United States was also conducted using methadone to treat heroin addiction in the 1960's. This research revealed how using

methadone allowed addicts to gradually reduce their use of morphine (an opiate drug) to the point of total withdrawal; regaining normal, productive lives (MOHLTC, 2007).

Although other substitute/maintenance treatment options are available, MMT remains the most successful treatment for addiction to heroin and other opiates across the globe (WHO, 2008).

Of the estimated 80,000+ individuals using illicit opiates in Canada in 2006, 30,000 resided in Ontario (CPSO, 2011). According to Fischer et al (2006) the number of people, in Canada, receiving MMT for heroin addiction increased dramatically from approximately 5,000 spaces in mid 1990s to an estimated 25,000 spaces in 2006. This translated into 25% - 30% of opiate users in Canada receiving MMT for addiction in 2006. In 2007, the number of individuals in Ontario receiving MMT was approximately 16,400 (Silversides, 2009). In 2009 this number rose by 70%; there were between 260 – 280 physicians prescribing methadone for opiate dependence to an estimated 24,000 individuals in the province of Ontario (Silversides, 2009). MMT has been shown to reduce risk of HCV and HIV infections for addicts who adhere to treatment protocols and refrain from high-risk behaviours associated with injection drug use (Fischer et al., 2006b).

Kakko et al. (2007) conducted a RCT at a treatment facility in Sweden to compare MMT practices to other forms of treatment. The study compared two randomly assigned similar groups (n=48 clients per group) of self-referred addicts attending a treatment facility. The research began as a double blind study (during first month) and continued single blind for the remaining ten months of the study. MMT programs were compared with use of a stepped strategy using buprenorphine, another opiate drug used in

replacement therapy. Results for the two groups were almost indistinguishable with 78% of subjects maintaining adherence at the end of the study. Although researchers hypothesized the stepped strategy would not be equal to MMT programs, the study indicated buprenorphine is effective as an initial treatment, versus replacement for, traditional MMT practices. However, in response to the study by Kakko et al., Brady (2007) made an important statement regarding the availability of methadone for patients and its short half-life as compared to buprenorphine. According to Brady (2007), more research studies into the efficacy of buprenorphine replacement therapy for treating injection drug users (IDUs) and prescription opiate users are warranted as research on the latter is limited while becoming increasingly necessary considering usage trends previously discussed.

The study by Nosyk et al. (2009) attempted to discern the effectiveness of MMT in British Columbia, Canada by accessing coded province-wide PharmaNet data regarding treatments provided to addicts between 1996 and 2007 ($N = 32,656$ treatment episodes). The researchers constructed a proportional hazard gamma frailty model to determine effectiveness based on retention rates in MMT programs over six, 12, 24 months, and one to six attempts at treatment. Results indicated that addicts who repeatedly attempted to adhere to MMT practices were more successful over the long term with each successive attempt. Of the clients who attempted treatment four to six times, their length of adherence increased by 85% - 90% as compared to initial and second attempts (Nosyk et al., 2009).

In contrast, a study conducted at a treatment facility in New York, USA, used a combination of quantitative and qualitative research methods. In this case instruments

such as the Addiction Severity Index (ASI), Risk Behaviour Assessment (RBA), Opinions about Methadone (OAM) Scale, and focus groups were the vehicles used to examine attitudes towards MMT and the rate of relapse while addicts were enrolled in treatment. Results showed a statistically significant reduction in adherence to MMT among individuals with negative attitudes toward methadone (Kayman, Goldstein, Deren & Rosenblum, 2006).

In Canada, a RCT was conducted to examine the effects of a 6-month low-threshold MMT program on injection-related HIV risk among opioid users in Kingston, Ontario and Toronto, Ontario (Millson, Challacombe, Villeneuve, Strike et al., 2007). The researchers studied MMT programs inside NEPs operating with a harm reduction focus. Subjects for the study were users of opiates and recruited upon entry into low-threshold MMT programs. The study was conducted between 2000 and 2004. Two hundred and three subjects were enrolled at baseline; 183 were interviewed at the 6 month follow up. Participants were mostly Caucasian males between the ages of 18-54. At 6-month follow up 138 of the original 183 subjects (92.7%) were still enrolled in their original MMT program. Results indicated a statistically significant drop in injection drug use, sharing of needles and other injection equipment, indirect sharing, and the use of shooting galleries. Risky behaviours associated with HIV were reduced regardless of whether clients achieved abstinence (Millson et al., 2007).

There exists a solid body of literature examining traditional MMT for illicit opiate use in Canada and abroad. Similar research studies focused on using MMT for the treatment of dependence on prescribed opiates are not as prevalent. However, one recent retrospective cohort study was conducted in Washington State, USA, by Banta-Green,

Maynard, Koepsell, Wells, & Donovan (2009) to compare retention rates in MMT programs between users of prescribed opiates with heroin users. The researchers were interested in determining whether prescription opiate users would derive the same benefit from traditional MMT programs as heroin users. Data for the study was gleaned from an electronic information system (TARGET) compiled of data collected from the Addiction Severity Index (ASI) (Banta-Green et al., 2009). Based on the analysis of the data, prescription opiate users were determined to be more apt to remain in MMT programs over 12 months as compared to heroin users (Banta-Green et al., 2009). These results are encouraging considering that MMT programs are well established and widely available. Also, the results from this study are immediately useful to other countries, such as Canada, where prescription opiate use has been identified as a rising concern (Fischer, Gittins, & Rehm, 2009).

Mendelson, Flower, Pletcher, and Galloway (2008) discussed the characteristics of patients identified with addiction to prescription opiates and the use of buprenorphine as a treatment strategy in the USA. Unlike methadone, physicians can offer buprenorphine replacement care to patients from their offices. This includes addressing any underlying emotional/psychological issues as well as opiate dependence. Additional benefits associated with the use of buprenorphine included positive responses, both physical and cognitive, included the reduced likelihood of overdose as compared to methadone, and better adherence to treatment (Mendelson et al., 2008). Further research into the length of treatment regimes using buprenorphine is warranted as little data currently exists. The authors do not advocate replacing MMT with buprenorphine, however, the convenience and effectiveness of treating patients with prescription opioid

dependence in an office setting is very promising. Until there is a system in place for the detection of patients at risk for opiate dependence, this may be one reasonable strategy for addressing the current problem (Mendelson et al., 2008).

In Australia, a RCT was conducted in 2006 to compare MMT to buprenorphine for opioid dependence. Ten years later, Gibson, Degenhardt, Mattick, Ali, White and O'Brien (2008) conducted a longitudinal study on the subjects recruited in 2006 to determine any differences in mortality rates between the two groups. The results of their study revealed no significant difference in mortality rates associated with either treatment. In fact, older participants were identified as faring better with buprenorphine over MMT. What did influence the overall outcomes was availability of treatment versus the drugs themselves. Overall, this study supports similar findings regarding the effectiveness of buprenorphine as a long-term treatment option for opiate dependence in addition to traditional MMT (Gibson et al., 2008).

Controversy Associated with Harm Reduction Approaches to Treatment

Leshner (2008) has outlined some of the issues surrounding the debate over implementation of the aforementioned harm reduction strategies. Questions have been raised about whether or not the betterment of communities at large comes at the expense of the addicts. Are health professionals supporting the continued use of and/or addiction to illicit drugs by advocating solutions other than abstinence? Leshner (2008) has further identified the political controversy surrounding advocating the establishment of facilities (SIFs) where addicts are supervised by health professionals as they engage in illegal activity. Consequently, policy-makers do not recognize research related to the topic resulting in a lack of support for such spaces because they do not want SIFs in their

communities. Moreover, MMT and buprenorphine therapies are scrutinized as replacing one opiate addiction (heroin) with another (methadone /buprenorphine) versus abstinence by users. These views exist even in the presence of extensive international research in support of MMT and other harm reduction strategies (Leshner, 2008).

Nosyk and Anis (2009) cited more recent controversy regarding dispensing of methadone practices by pharmacists in Vancouver, Canada's, Downtown Eastside. Specifically, questions have been raised regarding incentives being offered to methadone patients by some pharmacists in Vancouver to entice customers and increase their business. Other pharmacies offer supplemental mental health care which may/may not include a fee for service. Nosyk and Anis (2009) discussed the positive and negative aspects associated with such practices, eventually coming to the conclusion that, regardless of the money being made, access to methadone is what is most important.

The term *harm reduction* has been interpreted by some as meaning society should accept that addiction and its associated harmful behaviors (to self and others) are not curable and therefore should be supported by harm reduction approaches such as NEP, MMT, SIFs, and others. In some instances the term becomes linked with legalization of illicit drugs. This makes policy reform and implementation, and requests for research funding very difficult. Leshner (2008) argued the term *harm reduction* should be changed to something more suitable in order to remove barriers to conducting research and the implementation of public health programs (Leshner, 2008).

Current Trends in Illicit Use of Opiates in North America

In 2008, the Canadian Journal of Public Health released a report outlining the urgent need for increased research and policies regarding the growing trend of non-prescription opioid abuse in Canada and North America (Fischer, Rehm, Goldman, & Popova, 2009). These important recommendations were based on data gathered from (mostly) the United States of America (USA). For example, reports indicated that the USA experienced an estimated increase of 300% in the abuse of prescription opioids among adults and youth between 1991 and 2001 (Fischer et al., 2009). Furthermore, treatment for prescription opioid abuse in USA emergency rooms increased between three and six times between 1997 and 2002 with rates of overdose from the same doubling between 1999 and 2002 (Fischer et al., 2009). One possible reason for this surge in the abuse of prescribed opiates may, in part, be due to the increased prescribing of potent opioids for pain management by physicians. According to Fischer et al. (2009) the USA is now considered the world's leader in analgesic opioid prescription.

Canadian data on the same issues is sporadic at best. However, Fischer et al. (2009) suggest similar trends associated with non-medical opiate abuse exist in Canada. Specifically, they cited the estimated 50% increase in consumption of prescription opioids in Canada between 2000 and 2004 as one indication. Furthermore, in comparison to the USA, Canada ranks third in the world for prescribing opiates (Fischer et al., 2009). There is also cause for concern over recent data gathered from a study conducted in 2005 on illicit drug use in five Canadian cities. Results from the study suggested that the use of prescription opioids by addicts in some regions of the country has surpassed heroin.

Moreover, 80% of users receiving MMT in Toronto in 2002 identified themselves as using prescription opiates upon admission into a treatment program (Fischer et al., 2009).

In addition to the above, a recent article examined the epidemiology of the misuse of prescription opiates in North America. The authors suggest this new trend in drug use began in the mid 1990s and has escalated to the point where street use of prescription substances is epidemic among users (Fischer, Gittins, & Rehm, 2008). This information is based on longitudinal studies involving addicts enrolled in MMT as well as users who were not in treatment. In both Canada and the USA, the study identified rural areas as having the largest increase in abuse of prescription opiates in recent years. Interestingly, the assumption that heroin was being replaced with prescription opiates was proven wrong. In fact, the majority of users in rural areas reported never having used or injected heroin prior to developing problems with prescription opiates (Fischer, Gittins, & Rehm, 2008).

As previously mentioned, the availability of prescribed opiates is seen as a major contributing factor in the misuse of these drugs. Fischer, Gittins, and Rehm (2008) raised an important point when comparing illegal opiates to prescription opiates. For example, illegal opiates are manufactured outside of North America, transported illegally and sold at street level using black market pathways. Although they are not without scrutiny, strategies for the disruption of these actions (law enforcement efforts) have been in place for many years. In contrast, addressing the influx of legal opiates for illegal use on the streets presents more of a challenge. Fischer, Gittins, and Rehm (2008) identified multiple ways in which prescription opiates are able to reach users at the street level. For example, patients may honestly, or dishonestly, present symptoms to physicians in order

to acquire opiate prescriptions, physicians and pharmacists may engage in illegal activities, patients may purposely seek more than one physician to fulfill prescriptions for the same condition (double-doctoring), and thefts targeting drug companies (internally and externally) may be committed (Fischer, Gittins, & Rehm, 2008).

Intervention strategies introduced in the 1990s in parts of the USA were an attempt to control the amount of prescription opiates being misused. These efforts have focused mainly on those who prescribe opiates through the establishment of prescription monitoring programs (PMPs). However, questions have been raised about the effectiveness of these control efforts. For example, prescribers are challenged to determine who is, and who is not, a legitimate candidate for prescription opiates. In addition, prescribers have indicated that they may choose not to adequately prescribe medications for patients due to fear of scrutiny or investigation by authorities (Fischer, Gittins, & Rehm, 2008). In many of the USA states where PMPs have been implemented, reports have indicated a substantial reduction in opiate prescriptions in comparison to states without established PMPs. This may have serious implications for best practices treatment for pain management resulting in unintended harms to patients (Fischer, Gittins, & Rehm, 2008).

Prescription opiates are not only misused at the street level. Streltzer and Johansen (2006) have suggested that the increased use of prescribed opiates for patients suffering from chronic pain is a main contributor to the problem. In their article, case studies involving real patients are presented as examples of how well-intentioned treatment regimes for legitimate health concerns can escalate to become a public health problem. The physicians chronicled their experiences with patients who were prescribed

opioids for pain management and the resulting complications associated with their subsequent dependence on the medication. In one case study, a patient fatally succumbed to her addiction to prescribed opiates. Treatment strategies, including MMT and counselling, are outlined in the article as being paramount for patients who develop a dependence on prescribed opiate pain medication (Streltzer & Johansen, 2006).

Knowledge Gaps and Future Trends

In September, 2009, the Beckley Foundation Drug Policy Programme released a briefing paper comparing drug situations across six European countries, the USA, Canada, Australia and New Zealand. Eight sets of indicators were used to guide the comparisons. These included: 1) prevalence of drug use, 2) problem drug use, 3) drug-related deaths, 4) rates of drug-related HIV and HCV, 5) drug-related arrests and punishments, 6) drug-related crimes, 7) costs of drug use, and 8) drug policy expenditures (Degenhardt, Hallam, & Bewley-Taylor, 2009). Based on the results of the comparisons, the authors outlined discrepancies related to the ways in which individual countries measure drug use. Arguments for the standardization of the process in the future were presented as the authors indicated the important role that each country's approach to the issue would have on the development of drug policy. Collaboration between nations on this issue was presented as necessary in order to achieve a better overall understanding of changing trends in illicit drug use, and the harms associated with the problem on local and global scales. These collaborative initiatives among nations were suggested as vital to the establishment of better evidence-based international drug policies in the future (Degenhardt, Hallam, & Bewley-Taylor, 2009).

While information currently exists regarding the number of persons accessing treatment for opioid addiction in North America, and around the world, there is clearly a lack of research and empirical data concerning the obvious paradigm shift in opiate use. For example, at present, there is no system in place to track and monitor the extent of prescription drug abuse in Canada. Subsequently, this results in an additional lack of research and information regarding treatment strategies and options for the same. As previously stated, the use of MMT for treating heroin addiction is well established. However, research regarding the effectiveness of MMT, over the long term, to treat prescription opiate dependence is lacking. National surveys do not currently ask questions to address the issue of prescription drug abuse/dependence (Haydon, Rehm, Fischer, Monga, & Adlaf, 2005). Haydon et al., (2005) recommend the inclusion of drug abuse categories and questions in national surveys, similar to those regarding illicit drug use as one way to address this knowledge gap. In addition, research targeting smaller locales in North America may be warranted considering the current rise in prescription opiate use in these areas as formerly outlined in this document.

In 2002, Mark Haden produced a document for the Canadian Journal of Public Health. His article outlined and debated the eight national policies regarding illicit drug use in Canada which are still relevant today. Although written almost a decade ago, Haden (2002) outlined recommendations for necessary changes in attitudes regarding the ineffective “war on drugs” approach to illicit drug use in Canada, calling instead for evidence-based drug control policies. It is ironic that Canada continues to be stuck in a 2002 mentality when it comes to dealing with this public health issue. Many of the issues

Haden (2002) discusses, such as drug legalization, market regulation, allowing drugs to be prescribed, decriminalization, etc. remain unresolved.

Research in North America, and the world, is beginning to address some of these concerns. As a result, innovative approaches to the problem are beginning to emerge. In addition to discussing well-established MMT approaches to managing opioid dependency, Abbott (2009) presented data involving supplemental psychological therapy for clients, referring to this form of treatment strategy as Community Reinforcement Approach (CRA). Abbott (2009) reported on several USA studies conducted on the effectiveness of treating various types of dependency and associated elements (such as relapse) by combining CRA with medically prescribed drugs such as buprenorphine and naltrexone. One innovative study involved the use of CRA in combination with computer-assisted treatment (Abbott, 2009). This study used a computerized treatment system in conjunction with a urinalysis monitoring device. Clients received support and treatment via modalities such as videos and computer technology, and were required to complete certain educational tasks related to their condition. Progress and urinalyses reports were received by therapists electronically. Of the more than 80 clients registered in the program, 50% of clients showed a urinalysis free of opioids as compared to 35% enrolled in standard treatment and 56% who used therapy (Abbott, 2009). This is a significant finding. Not only was the CRA computer-assisted identified as an effective treatment for clients, it was more cost effective than the other treatments mentioned and showed equivalent retention rates (Abbott, 2009). This option may be worth exploring as the face of opiate addiction continues to change. Specifically, this treatment strategy may support patients who unintentionally develop dependence on prescription opiates and

have access to computer technology from home, as well as opiate users who live in geographic areas where transportation to treatment facilities on a regular basis is a barrier to care.

Summary

Addiction to opiates continues to be a major public health issue in Canada. Disturbing new trends in opiate dependency in North America, and around the world, only add to existing political, medical, societal and personal challenges associated with the problem. Fischer, Gittins and Rehm (2008) remind us that no intervention strategies are currently in place to stop the influx of prescription opiates into the world of illegal drug use. Although MMT is the accepted gold standard nationally and globally for treating opiate addiction, literature reviewed for this document clearly indicates a need for increased research into the effectiveness of MMT for treating persons dependent on prescription opiates versus just heroin.

It is clear that harm reduction approaches are supported worldwide as viable options for dealing with opiate addiction and associated harms affecting individuals and communities. British Columbia's perseverance in the 1990's to change mind-sets and attitudes toward dealing with issues related to drug addiction has opened the door for other Canadian cities to do the same. Clinical trials, like the NAOMI Project, provide evidence of viable alternatives that might be modified to suit smaller centers. While strategies such as HAT and SIFs remain controversial and sparse, MMT remains an effective harm reduction approach to management of opiate addiction in Canada, and abroad. Until such time as HAT and SIF options are more widely available, it would be

safe to assume that MMT will remain the standard form of treatment for heroin/opiate addiction in Canada.

Current literature alerts us to the shift in opiate dependence from illicit street drugs (heroin) toward increased dependence on prescription opiates (OxyContin). This shift in usage is compounded by geographical changes as smaller locales in North America experience marked increases in prescription opiate dependence by users who did not have an initial dependence on heroin. The evidence is clear. Support through quality MMT and other harm reduction programs not only improves a quality of life and reduces co-morbidity for addicts, it improves the health of entire communities (Nosyk, et al., 2009). What is not clear is whether or not current MMT programs are able to meet the needs of shifting trends in the types of opiates being used and whether or not there are sufficient numbers of MMT programs to service the increase in the number of individuals requiring care and the geographical considerations that also must be addressed.

The following research study has attempted to identify: 1) who is using opiates in a small Ontario city, 2) who is accessing MMT for their addiction, 3) whether or not the current services available are meeting the needs of individuals, and 4) what changes to existing MMT services might help improve access, retention, and success for individuals who require this type of care.

CHAPTER 3

RESEARCH METHODS

The various methods used to conduct this research study were chosen in order to provide insight from all perspectives of the issues and to place the information gathered in the context of a small Ontario city.

Research Aims and Objectives

This study was designed to determine whether MMT, and other local health services, are meeting the needs of opiate users in Belleville, Ontario, Canada. Belleville currently has two privately run, for-profit methadone clinics that provide MMT services to opiate users in Hastings and Prince Edward Counties. Another option that may be considered for meeting the needs of opiate users in the community is a not-for-profit public MMT clinic. In conversations with key informants, a common theme was identified. Every person interviewed raised the question about having a not-for-profit clinic available as part of a public health clinic/centre that would also offer MMT programs for opiate users in the community.

The effectiveness of health services available to the public can be measured in many ways. Part of measuring the effectiveness of MMT involves considering users who would benefit from the services but, for any number of reasons, may not take advantage of them. With this in mind, the research objectives for this study included:

1. Placing current health services, including MMT programs, available to opiate users in Belleville, Ontario in the context of a rural community
2. Enhancing the current understanding of the quality of life of individuals who might benefit from access to MMT.

3. Identifying the health care needs of opiate users who may/may not be accessing MMT services.
4. Ascertaining whether opiate users accessing MMT are satisfied with the services provided.
5. Suggesting ways to improve health services for opiate users based on what was learned from the investigation.

Research Questions

Quantitative and qualitative research techniques were used in an attempt to answer the following research questions:

1. Among opiate users in Belleville, Ontario what is the satisfaction with current health services, including MMT, available to opiate users?
2. What health services including MMT, do opiate users in Belleville, Ontario feel are most important and which services are they currently accessing?
3. What are the experiences of persons currently accessing MMT in Belleville, Ontario?
4. How do attitudes and opinions about MMT differ between opiate users accessing MMT and opiate users who do not?

Research Methods: A Community-Based Approach

Supplementing quantitative results with qualitative information in health research allows for a human perspective on the issues being explored. Qualitative methods used to gather research data may vary (Bowling & Ebrahim, 2007). This community-based research study employed an ethnographic approach to the collection of qualitative data. Community-based research is defined as research that is conducted in community settings

and produces results which are meaningful to the community; a collaborative exercise between researchers and community stakeholders in the construction, execution, and distribution of the research and the subsequent findings (Center for Community Based Research (CCBR), 2011). Community based research studies are used to benefit communities by facilitating social change and fairness (CCBR, 2011). Ethnographic researchers engage in extensive fieldwork in their quest for knowledge regarding particular social groups as they exist in their natural surroundings (Creswell, 1998). Participant-observation is one qualitative method used by ethnographers. Creswell (1998) describes this method as one in which the researcher becomes engrossed in the lives of a population being studied through in-depth interviews and/or detailed, lengthy observations of individuals in their natural environment over a period of time.

This study employed all of the aforementioned community-based research principles. Community stakeholders played an important, frontline roll in the execution of this study. For example, in addition to ethical approval from the University of Ontario Institute of Technology (UOIT), support and approval from community stakeholders; the Hastings and Prince Edward Counties (HPEC) Injection Drug Users Harm Reduction Task Force (HRTF) (see Appendix A) and the local Mental Health Support Network (MHSN) was vital for data collection. The HRTF, in conjunction with the local Health Unit, approved and supported the research at a quarterly meeting (April, 2009) based on the study's potential for having positive impact for opiate users and the community as a whole. The MHSN required a formal copy of the research proposal which was reviewed by a committee responsible for overseeing the safety of individuals who access the local drop-in support center. The researcher asked for permission to visit the centre on a

regular basis; at least two days per week between June 1, 2010 and July 31, 2010. The MHSN approved the visitation request and also provided space to conduct the focus group sessions. Without support from the MHSN, access to the target population may have proved more difficult.

Initially, the sudden appearance by the researcher was met with some reservation by the regular members of the drop-in center. However, approval by the members was quickly obtained due to the researcher's affiliation and relationship with the street nurse and peer councillors at the drop-in centre. Accompanying the street nurse during rounds provided the researcher with an additional opportunity to associate with the target population. Over the course of the data collection, personal contact between the researcher and individuals at the drop-in centre was extensive. Trust and acceptance were gained over the course of the study as the researcher gradually became part of the scenery; eventually viewed as a trusted, familiar, non-judgmental person that the members and opiate users could talk to about their personal experiences over a cup of coffee, a game of chess, or a walk down the street. The conversations were raw, honest, and, at times, disturbing. Business at the centre carried on as usual once acceptance was gained and the researcher's presence did not appear to affect the regular happenings at the facility. A detailed record of observations and field notes was generated over several months. Although this inside opportunity provided the foundation for open and honest surveys, interviews, and focus groups, deception and/or misrepresentation did occur during these undertakings. Regardless of this fact, the amount of time the researcher spent on the street and at the support centre most likely served to minimize these problems.

Quantitative data was collected using a survey tool which was made available and administered at the MHSN drop-in support centre, a centrally located space in the downtown core. The facilitation of the survey was conducted by the researcher with assistance from the local street nurse who was well known and trusted by the target population. Many of the survey questions were based on an original survey conducted in the region in 2001. The original survey was designed to gather data to identify needs of local injection drug users and provide recommendations for appropriate harm reduction strategies. Appendix B provides a copy of the new survey tool developed for this study. This new survey asked questions regarding: baseline demographic data, general characteristics of the sample population, access to health services, levels of satisfaction with current health care and MMT services, and opinions about methadone. Although the majority of survey questions were closed-ended, some questions did allow for written responses and additional comments by participants.

Qualitative data was collected using focus group sessions, conversations with key informants, field notes, and through participant observation. For example, the researcher interacted with the target population beyond the time required to complete the survey tool. On several occasions, completion of the surveys resulted in conversations with the respondents who were very interested in the research being conducted and welcomed the opportunity to share their stories. Detailed field notes and observations of these encounters were documented on a regular basis. Opiate users (past and present) were invited to attend one of two focus group sessions to share their experiences regarding opiate use, their experiences with MMT, and their satisfaction with health services (including MMT) currently available to them. Appendix C outlines the guiding questions

asked during the focus group sessions. A more detailed analysis of the focus group sessions is presented in Chapter 5. In addition, an amendment to the original UOIT REB application was submitted and approved in order for the researcher to conduct informal interviews and engage in conversations with key informants including: a pharmacist, a downtown business owner, a member of the downtown business improvement association, a Health Unit staff nurse who administers outreach for the target population, a street nurse, and opiate users.

Inclusion / Exclusion Criteria – Surveys and Focus Groups

Individuals who currently used opiates on a regular basis and/or accessed local MMT services at either of the two clinics in the community were invited to complete a survey and attend one of two planned focus group sessions. The inclusion/exclusion criteria for participation in the research study were as follows:

1. Participants had to be at least 18 years of age
2. Participants could be male or female
3. Participants did not complete the survey more than once
4. Participants had to be currently using opiates and/or MMT services available in the research area
5. Participants were not receiving MMT outside of Hastings and Prince Edward Counties, Ontario.

Recruitment and Sampling Techniques

A targeted convenience sample for this research study was obtained with cooperation from local members of the local Injection Drug Users Harm Reduction Task Force (HRTF), the MHSN (Belleville Freedom Support Center), local pharmacies who

dispense methadone, one of the two methadone clinics in the area, a local street nurse, mental health workers, local businesses who agreed to hang posters, and by word of mouth. Both of the local methadone clinics were visited by the researcher and invited to put up posters (see Appendices D and E). Only one of the clinics was willing to take part. Similar declines to invitations to participate in the recruitment of respondents for the study were experienced at local pharmacies. Although three pharmacies were approached, only one was willing to participate. This pharmacy not only hung posters, it provided methadone clients with copies of the poster to encourage them to participate in the survey. Several respondents arrived at the Belleville Freedom Support Centre (BFSC) with copies of the poster. For many, it was the first time they had ever visited the space. This was an added bonus as it meant they were also introduced to peer support workers, mental health support workers, a safe space where they could eat an affordable meal, and meet other individuals experiencing similar challenges. Posters were also placed in public places frequented by the target population as well as storefronts in the vicinity of the methadone clinics.

Key informants were approached in person or by telephone by the researcher and invited to participate in an informal interview to provide their perspectives on MMT services available in the community. Appendix L provides examples of the types of questions asked during these semi-structured interviews. Among those approached were: a doctor who prescribes methadone, a local pharmacist, a street nurse, a downtown business owner, a local outreach health worker, a mental health and addictions worker, a member of the local downtown business improvement association and opiate users. The doctor was the only individual who declined the invitation to participate.

As previously mentioned a similar survey involving members of the same target population was conducted in 2001 and yielded 31 respondents. This study focused on the injection practices of IDUs in a number of small towns and cities located in Hastings and Prince Edward Counties, Ontario, including Belleville. Although the study did not solely look at opiate use, results showed that opiates (by injection) made up the majority of drug use over the previous 12 months (Melinyshyn, 2001). Key informants speculated that this new study would see a similar sample size based on the smaller geographic area and the focus on individuals using only opiates. However, upon conclusion of the administration of the new survey, the sample size was 54.

Research Timelines

Data collection for the research study began in June, 2010. Posters were placed in various downtown locations, word of mouth was instigated and surveys were made available to eligible participants between June 1 and July 30, 2010, every Tuesday and Thursday (at minimum) from 10:00 am to 3:00 pm. Completed surveys were collected by the researcher on a daily basis. Focus group sessions were advertised in July, 2010, with two sessions taking place in August, 2010. The majority of data was collected in the spring/summer months to allow for seasonal trends associated with drug addiction (Utts, 2005). Data analysis commenced in November, 2010 with completion in March, 2011.

Data Collection

As previously stated, the time and location for the survey and the focus group sessions were advertised through word of mouth, posters located in local storefronts, needle exchange sites, pharmacies dispensing methadone, downtown businesses, and the methadone clinics (see Appendices D and E). People who expressed interest in

completing the survey were interviewed briefly by the researcher or the street nurse to confirm eligibility for the study. It was important to clearly determine eligibility as the \$20 incentive resulted in several inquiries from persons who did not use opiates or MMT. Some people were asked to produce picture identification to verify they were at least 18 years of age. People who were not currently using methadone were interviewed by the street nurse to determine if their opiate use was significant enough to where the user would require assistance, such as MMT, to stop using opiates.

The street nurse has an extensive background working with opiate users and MMT clients. His expertise in determining eligibility was a crucial component of the data collection process. Eligible respondents were invited to participate in the quantitative and qualitative components of the study. Each participant received a letter of invitation and informed consent prior to any participation in any part of the research study in accordance with the Tri-Council Policy and UOIT Research Ethics Board Guidelines. A copy of the letters of invitation and the consent forms for participation in the survey and focus group sessions are provided in Appendices E and F. No limit was set to the number of eligible participants who could complete the survey. However, a maximum of six participants were allowed to register for each of the two focus group sessions.

Quantitative Data Collection

Development of the Survey Tool

Advice for development of the survey tool was solicited from experts in the field and key informants in order to ensure content validity and relevance. The survey was comprised of mainly close-ended questions. There was an opportunity to assist

community stakeholders by including questions comparable to those asked on the aforementioned survey conducted by the HRTF in 2001. These included questions regarding participant characteristics and demographic data, injection drug use, and needle practices. In addition, the new survey asked questions about health services currently available to users, access to care, experience with opiate use and MMT, and opinions about methadone (based on the Opinions About Methadone (OAM) scale). The OAM scale is reported by Kayman, Goldstein, Deren, and Rosenblum (2006) as having face validity and factorial validity as well as internal consistency reliability and predictive ability. Readability of the survey was confirmed by experts and any changes were made based on their recommendations to ensure the reading level and wording was appropriate. Organization of the survey questions was implemented based on feedback from field experts (Center for Addiction and Mental Health (CAMH)). For example, similar survey questions were grouped into categories and sections for better flow and easier data analysis. The final survey used for this study was the result of months of work involving several drafts with input from the researcher's team of university advisors and field experts.

Prior to making it available to respondents, the survey tool was piloted using a test re-test method with individuals who were recruited by the street nurse. The test re-test involved an initial completion of the survey by participants who met the inclusion criteria for the study followed by a second completion of a new copy of the same survey by the same participants two weeks later to identify any areas of inconsistency within the survey. The test re-test analysis was conducted using a Cohen's Kappa analysis. Combined with the feedback from experts (CAMH, journalist) regarding the readability

and content of the survey, the survey was deemed ready for data collection. Additional information regarding the Cohen's Kappa analysis is presented in the Quantitative Data Analysis section of this chapter.

Administration of the Survey

The local Mental Health Support Network (MHSN) established dates and times for conducting surveys at the BFSC with the researcher and the street nurse. Surveys were advertised as being available to persons meeting the inclusion criteria two days per week for six hours per day between June 1, 2010 and July 31, 2010 at the BFSC. The street nurse assisted with the research study by screening potential research participants to determine eligibility and assisting with facilitation of the surveys. This was necessary in order to weed out individuals who were solely motivated by the \$20 incentive and did not qualify for the study. Some individuals were identified as providing fraudulent information during the brief pre-screening process. The expertise and training provided by the street nurse in determining eligibility was instrumental in ensuring the sample was correct.

Each survey was numbered. No other identifiers were listed on the survey. All letters of invitation and informed consent were kept in a locked file cabinet on site at the BFSC in the event confirmation about whether participants had already completed a survey was required. Confidentiality was maintained at all times. The street nurse and researcher both signed a confidentiality agreement (see Appendices H and I). Individuals meeting the aforementioned inclusion criteria received a letter of invitation and a letter of informed consent (see Appendix F) prior to their participation in the survey. Completed letters of invitation and informed consent were secured in a locked cabinet in a locked

office at the BFSC. Both letters were destroyed upon completion of the data collection process. Each participant was informed of these precautions.

Participants were offered a private space (if they wished) where they could complete the survey. The street nurse and/or researcher were available to clarify any questions regarding the survey and to confirm all questions had been answered prior to paying participants \$20 for their time. There was no way to link a survey with a participant. Completed surveys were collected at the end of each research day and kept in a secure, locked cabinet at the researcher's residence. Informed consent documents were kept in a secured, locked file cabinet at the research site. The response rate was calculated (54 completed surveys) at the end of the quantitative data collection (after July 31, 2010). Upon completion of the research and this thesis, any remaining paper and electronic information linking individuals to completed surveys will be destroyed (shredded and/or deleted).

Qualitative Data Collection

Two separate focus group opportunities were provided for individuals wishing to participate in this study to allow for variance in availability and to improve the chances of obtaining enough data for the study. Advertising the dates, times and location of the focus groups was achieved with assistance from the street nurse, a pharmacist who dispenses methadone, health workers involved in a local needle exchange program and downtown businesses who dedicated space for signage. The two sessions were held at the Belleville Freedom Support Centre (BFSC) in August, 2010. Sign-up sheets were available at the BFSC for individuals who met the aforementioned inclusion criteria. To protect confidentiality, contact information provided by eligible participants (sign-up

sheet) was secured in a locked file cabinet at the research site. Each focus group session was limited to a manageable, maximum number of six participants (Bowling & Ebrahim, 2007). Although focus group sessions with fewer than six participants may not generate a usable amount of data, more than eight participants may result in some participants not being able to fully participate (time restraints and volume of information) and/or a session that is challenging to manage overall (Bowling & Ebrahim, 2007).

The local street nurse assisted with the facilitation of the focus group sessions and was available to provide care to any participants who might experience emotional distress as a result of the process. Permission was received from all participants for the audio recording and the taking of field notes and confidentiality was maintained at all times. The street nurse, the researcher and all participants signed a confidentiality agreement prior to each focus group session (see Appendices H and I). Informed consent was delivered verbally as well as on paper. Participants were verbally reassured that none of the data collected would reveal any information connecting the research to any individual person. The researcher also signed a confidentiality agreement pertaining to data transcription (see Appendix J). All confidentiality agreements used in this research were approved by the University of Ontario Institute of Technology (UOIT) Research Ethics Board (REB). The incentives for attending and participating in a focus group session included a free meal and the offer of \$20 per person.

As previously stated, consent was obtained prior to the use of audio technology in order to record the sessions and the confidentiality agreements were signed by all who attended including the participants, the researcher, and the research assistant. Two digital

audio recorders were used to capture the exchange (Panasonic RR-US551 'Zoom Mic' and an Olympus Digital Voice Recorder VN-3100PC).

Based on observations and research gathered by the surveys and during the focus group sessions, it became apparent that additional information from key informants would be necessary in order to place the study in the context of a small city. It was anticipated that this additional data would provide a more complete picture of the issues surrounding MMT services currently available in the community as well as provide suggestions for specific improvements. An amendment to the original UOIT REB application was submitted and approved. The amendment outlined reasons why the informal interviews were necessary, questions the researcher would ask community stakeholders and steps that would be taken to ensure confidentiality and anonymity such as informed consent and confidentiality documents. Appendix L outlines examples of the types of questions asked during these informal interviews with key informants. Appendix K provides a copy of the letter of informed consent and the confidentiality agreement signed by each interviewee and the researcher. Concerns expressed by community stakeholders, their observations and perceptions about the local methadone clinics, and their suggestions for improving MMT services in the community are outlined in further detail in Chapter 6 of this thesis.

Data Analysis

The following section discusses the processes used to analyze the quantitative and qualitative data collected during the course of this research study.

Quantitative Data Analysis

Descriptive statistics and cross-tabulations of selected variables were analyzed using the statistical software, SPSS Version 18. In addition, an online tool was also used to conduct the Cohen's Kappa analyses of the survey tool. This analyses used data collected during the test re-test process previously mentioned. The Cohen's Kappa analyses are used to measure the level of sameness between two sets of ratings or scores (Wood, 2007). For this study, a Cohen's Kappa analysis was used to measure responses by two individuals who completed the same survey two weeks apart. Four questions were selected from the completed surveys and answers to the same questions were compared between Time One and Time Two for both responders. Three of the four questions were answered exactly the same way by respondents both times they completed the survey. This resulted in a Kappa of one for those three survey questions, which equates to a high degree of reliability. However, on one question, there was a slight difference in the responses between Time One and Time Two. This may have been due to the nature of the question. For example, the question asked respondents to rate their overall health. The answers may have varied according to how the respondents were feeling at the time they completed each survey. The small sample size used for this analysis (two respondents) is also a factor for consideration.

Qualitative Data Analysis

During the focus group sessions notes were taken by the research assistant (street nurse). In accordance with the transcription process described by Denzin and Lincoln (2000), the data analysis involved listening to the recorded sessions and writing down each word, pause, remark and statement to capture non-verbal behaviours during the

interview, such as laughter and pauses made by both the researcher, the assistant, and the subjects. Such details are considered an important part of the research process because they allow the reader to gain a sense of how the actual conversations played out (Denzin & Lincoln, 2000). The researcher compared the session notes with the audio transcriptions during the transcription process for further confirmation of accuracy. During the transcription of the audio recordings, each participant, the researcher and the assistant were assigned a specific code for easy identification. For example, the researcher's guiding questions were coded using the letter 'R' while subjects' responses were transcribed using a name or conceptual label that best captured what they had to say. This process was repeated for each focus group session. Upon completion, a coding scheme was developed to capture issues identified by all participants. The transcription was generated solely by the researcher. Due to the low response rate, the analysis of the focus group data was achieved manually. No analysis software was used. Each transcription was divided into segments of categories for comparison across groups based on specific questions or areas of inquiry. Common themes were gleaned from the data and grouped together for the final analysis. The detailed analyses, including quotations, are provided in Chapter 5.

Validation of Data

Allowing research subjects to be included in determining the truthfulness of the transcription of the data is regarded as important for validating accuracy of a transcription. This type of validation, through quality checks, has been identified as a way to ensure rigor in a study (Dallas, Norr, Dancy, Kavanaugh, & Cassata 2005). However, due to the transient nature of the target population for this research study,

information from focus groups could not be shared with participants. Instead, validation of accurate transcription and interpretation of the data was achieved by consulting the street nurse who attended both meetings and took field notes.

Strengths Associated with the Research Design

Although the use of surveys to gather data may not be considered as rigorous as a Randomized Control Trial (RCT), considering the target population, this approach did provide an environment most conducive to data collection. Surveys were distributed and facilitated by a trusted health worker at a location where the participants felt comfortable. This strengthened participation and resulted in a larger sample size. Questions on the survey were chosen based on a previous survey targeting the same population and geographic area, as well as questionnaires used in research studies, such as the aforementioned OAM Scale, specifically targeting illicit opiate users and those receiving MMT. Support for the project from community and health groups (HRTF, MHSN) helped to facilitate a better response from the target population. A ground level involvement over a long period of time by the principal investigator allowed trust to be established and enhanced the willingness of opiate users to participate in the survey.

The mixed method approach employed in this study further strengthened the overall research process. First, qualitative data was used to uncover deeper meanings behind the answers provided on the survey. For example, respondents were able to explain their level of satisfaction with MMT services and the reasons for their satisfaction/dissatisfaction. Second, the details provided in the stories and statements told by participants provided insight into new directions for future research. For example, focus group sessions provided details about specific suggestions for improving

services including better treatment from frontline staff and clinic hours. Similar examples on the usefulness of such strategies are outlined by Bowling and Ebrahim (2007).

Limitations Associated with the Research Design

Limitations associated with this research project include the following. Relying on opiate users to self-report on extremely personal health issues, especially considering the stigma surrounding addiction, proved challenging. Regarding the quantitative data collection, limitations included fraudulent representation by respondents in order to receive \$20 for completion of the survey. Also, some questions were left unanswered early in the study. Once it was realized that some participants were not providing answers to all questions, a decision was made to briefly scan each survey prior to ensure questions had not been skipped over by mistake. Some people may not have been familiar with the location of the BFSC which may have resulted in a smaller sample size.

Although the sign-up sheet for the focus group sessions was full, only seven individuals of the 12 who registered actually attended. Of those, only three had a history of opiate use that warranted MMT. In the other cases, the monetary incentives (money and a free meal) may have been the main objective resulting in fabricated or bad data. The presence of the street nurse and the researcher may have inadvertently influenced the quality and quantity of information participants were willing to share during the focus group sessions. Due to the transient nature of the target population, validation of the qualitative data with participants through member checks was not possible.

For both areas of the research design, findings may not be generalizable to other small communities. Additional research exploring MMT available to respondents with

geographical and demographic characteristics similar to this study is needed in order to identify any similarities or differences before generalizations about the results from this study can be made. Researcher bias may also be a factor. Denzin & Lincoln (2000) discuss how the mere presence of a researcher may alter/affect responses and actions on the part of research subjects. Being involved with the respondents on such a personal level over an extended period of time may affect the researcher's ability to remain objective; especially when dealing with a vulnerable population.

Summary

Addiction, including opiate addiction, continues to be a major public health issue in Canada (MOHLTC, 2007). MMT remains the accepted gold standard nationally, and globally, for treating the problem (WHO, 2008). Although most Canadian research has focused on populations in major cities, opiate addiction continues to be a public health concern in smaller regions, including Hastings and Prince Edward Counties in Ontario. This research is important considering the lack of research targeting MMT services available to users/consumers in smaller cities and towns. Upon completion of the research, findings may be useful to health professionals (doctors, nurses and pharmacists), and community outreach workers (needle exchange programs, street outreach). Finally, and most important, is the potential for positive impact on the lives of those suffering from opiate addiction by increasing chances at normalcy, providing better health care overall and possibly reducing stigma associated with persons struggling with addiction.

The following chapters present the results of the quantitative and qualitative data that was collected and analyzed. The research findings are then discussed and

recommendations for improving care and services for opiate users and MMT clients are presented.

CHAPTER 4

QUANTITATIVE RESULTS

The survey for this study was designed to describe the target population along several key dimensions: 1) basic demographics, quality of life, 2) health and health care, 3) opiate use (past and present), 4) experience with methadone maintenance treatment (MMT) (including level of satisfaction), 5) experience with social services, 6) the importance of availability of specific health services in the community, and 7) opinions about methadone. The following tables represent the data collected for each category and some provide comparison of certain cases, for example: males and females, and individuals who are receiving methadone and those who are not. Of the 54 surveys completed, one survey was deemed unusable based on answers regarding past/present opiate use.

Sample Population Demographics

Age, ethnicity, education, income level, sources of income, living arrangements, relationship status and family considerations were analyzed under the category of ‘sample population demographics’. Table 1 summarizes the demographic characteristics of the sampled population. Many of the characteristics parallel those used to describe most opiate users in other studies. Specifically, low income (poverty), homelessness, education level, lack of solid support systems, and use of other substances are among the characteristics identified (Pauly et al, 2007; Pauly, 2008; RNAO, 2009.)

Table 1: Sample Population Demographics, Total N = 53 except where indicated otherwise

VARIABLES	MALE	FEMALE	n (percent)
AGE			
• 18 – 29	12	4	16 (30.2%)
• 30 – 39	6	4	10 (18.9%)
• 40 – 49	12	5	17 (32.1%)
• 50+	8	2	10 (18.9%)
ETHNICITY			
• White	34	11	45 (84.9%)
• Aboriginal Canadian	3	3	6 (11.3%)
• Other	1	1	2 (3.8%)
EDUCATION COMPLETED			
• Public School	13	6	19 (35.9%)
• High School	22	5	27 (50.9%)
• College or University	3	4	7 (13.2%)
INCOME LEVEL			
• \$0 - \$19,000	34	13	47 (88.7%)
• \$20,000 - \$59,000	3	1	4 (7.6%)
• \$60,000 +	1	1	2 (3.8%)
SOURCES OF INCOME			
• Regular / occasional employment	8	3	11 (20.8)
• Social Assistance / welfare	19	5	24 (45.3%)
• Long term disability (ODSP)	9	6	15 (28.3%)
• Illegal activities / sex trade	1	1	2 (3.8%)
**LIVING ARRANGEMENTS			
• Homeless in past 30 days	5	1	6
• Shelter / boarding house	2	1	3
• On the street	4	2	6
• Rent an apartment / room	30	12	42
• Stay with friends / family	2	0	2
• Own home	0	0	0
**FAMILY/ RELATIONSHIP STATUS			
• Meaningful relationship	12	10	22
• Respondents with Children <19	13	8	21
• Children live with respondents	2	5	7

**Not all respondents provided answers *or* more than one answer chosen for the question

Age categories ranged from under 19 years to 50+. The majority of the sample (35, 71.8%) was 40 – 49 years of age. Thirty-eight (71.8%) of respondents were male; only 15 (28.3%) were female. Forty-five (85%) of the respondents identified their ethnicity as white; six (11.3%) were Aboriginal / Native Canadian and two (3.8%) were of mixed ethnic background. The vast majority (47, 88.7%) reported their total income for 2009 as below \$19,000 with most of the income provided by a variety of social

services including the Ontario Disability Services Plan (ODSP) and Ontario Works (welfare/social assistance). Other sources of income included regular employment and illegal means, such as prostitution. Just six (11.3%) identified themselves as being homeless during the past 30 days. Many of the respondents reported their 30-day living arrangements as a mixture of renting a room, staying with friends, staying in a shelter and/or sharing an apartment. Of the 21 respondents with children under the age of 19, only seven (13.2%) said their children currently lived with them.

Opiate Use and Injection Practices

Of the 53 respondents, 52 (98.1%) reported opiate use; 23 (44.2%) currently use opiates, 29 (54.7%) have used opiates in the past and one individual chose not to respond. Table 2 provides an overview of opiate use among the sample population.

Table 2: Sample Population Opiate Use*, $N = 53$

VARIABLES	<i>n</i> (percent)
CURRENTLY USE OPIATES TO GET HIGH?	
• Yes	23 (43.4%)
• No	29 (54.8%)
**TYPE OF OPIATES (Past and Present)	
• Heroin	7 (13.2%)
• OxyContin / Percocet/Percodan	26 (49%)
• Morphine	10 (18.9%)
**HOW DID YOU USE?	
• Injection	22 (41.5%)
• Orally	23 (43.4%)
• Snort	24 (45.3%)
** PROBLEMS ASSOCIATED WITH YOUR OPIATE USE	
• Financial	45 (84.9%)
• Relationship	30 (56.6%)
• Career/Employment	22 (41.5%)
• Legal	25 (47.2%)
• Mental Health	25 (47.2%)

**Respondents may select more than one answer *or* choose not to answer the question

The response to the question regarding current opiate use is important as it suggests there are individuals in the community who might benefit from participating in a MMT program but are not currently accessing these health services. This point is supported considering 24 (46.2%) of the respondents indicated they have never participated in a local MMT program (Table 3). The survey also revealed use of prescription opiates (OxyContin and morphine) was more prevalent than the street drug, heroin. Seven respondents (13%) reported heroin as their opiate of choice compared to 36 (67.9%) who identified prescription opiates.

Unlike OxyContin, percocet/percodan which are likely to be snorted or taken orally, morphine and heroine are often used via intravenous injection. Twenty-two (41.5%) of the respondents reported using drugs intravenously with six (27.3%) of these sharing needles and six (27.3%) sharing works. The term, works, is specific to intravenous drug use and refers to syringes and other drug paraphernalia required for preparation and injection of a drug. It is vital to understand current injection practices, including where users obtain their works and if works are shared among users. Many studies have been conducted on injection drug use and clearly identify the risks and harms associated with unsafe injection practices including sharing needles and other works, inappropriate discard of used needles, etc. (see Pauly, 2007; Millson et al; RNAO, 2009). Data gathered from this research study may be useful to allied health professionals involved in current local harm reduction strategies. Needle Exchange Programs (NEPs) track the number of syringes given to/returned by users and drug kits provided to users in the community. Future research focused on needle disposal and injection practices may provide the basis for improving harm reduction strategies for

injection drug users (IDUs) within communities. Local needle exchange sites (inside pharmacies) were used most often by the 22 respondents identified as IDUs (21, 95.5%). Only five (22.7%) reported obtaining their needles from a dealer or friend.

It is notable that 10 (18.9%) of the respondents chose not to answer the question about the types of opiates they used. The reasons for this may include fear of being identified as using other drugs while being in an MMT program, embarrassment, or fear of being judged. Stigma associated with opiate use and MMT persists among health care workers and the general public and has been identified as a barrier to treatment (RNAO, 2009). Despite re-enforcing confidentiality and receiving informed consent from respondents prior to their participation in the survey, participants know there exists a real possibility of being cut off of methadone should clinic physicians learn they are using opiates, or other drugs, while on the program. Data gathered during focus group sessions for this study supports this statement.

It is important for communities to monitor the types of drugs being used by consumers in order to identify any increase in harms associated with a shift in trends. Current trends in opiate use in North America lean towards an increase in the abuse of prescription opiates over heroin. From 2003-2005 Canada was ranked third in the world for prescription opiate use (Fischer, Gittins, & Rehm, 2008). Results of this current research study identified similar trends in Belleville, Ontario, regarding the shift to prescribed opiates. For example, 29 (46%) of the respondents identified prescription opiates as their drug of choice compared to 7 (13.2%) who identified heroin. Future studies focused on the illicit use of prescription opiates in smaller Canadian cities may be warranted.

Opiate use affects many aspects of a person's life: financial, professional, interpersonal, and private. When asked about specific areas of their life that have been affected by opiate use, 45 (84.9%) reported financial problems, 30 (56.6%) reported relationship problems, 22 (41.5%) reported career/employment problems, 25 (47.2%) reported legal problems and 25 (47.2%) reported mental health problems. There were no significant differences in opiate use between men and women. This may be due, in part, to the small sample size and may be grounds for future studies in order to verify any real discrepancies about opiate use between males and females.

Respondents' Experience with Methadone Maintenance Treatment Programs

Relapse is a common occurrence among individuals struggling with all manners of substance abuse; tobacco, alcohol, drugs, etc. (Pauly et al., 2007). When referring specifically to opiate addiction, options available to individuals who wish to stop using are limited. Choices include attempting to wean oneself off of a substance without medical support, stopping 'cold turkey,' and medically supervised substitution therapy such as MMT. Enrolment and retention in MMT programs is shown to be directly related to: attitudes and opinions about MMT and what it can do, interaction with frontline MMT workers (doctors, nurses), the dosage prescribed (if it is sufficient enough), and access to carries (Pauly et al 2007; RNAO, 2009; Kayman et al, 2006). Having access to carries profoundly affects an individual's experience with MMT. The ability to take home medication and avoid having to visit a clinic or pharmacy seven days per week allows individuals to lead a more normal life both personally and professionally. As previously mentioned in Chapter 1, there are guidelines for prescribing carries to clients. This study revealed that 21 (75%) of the 28 respondents received carries after only weeks in a MMT

program, three (10.7%) were granted carries after a number of months and four (14.3%) have never had carries.

Table 3 provides an overview of the responses to questions on the survey related to experience with MMT programs.

Table 3: Respondents' Experiences with MMT Programs*, $n = 28$

VARIABLES	<i>n</i> (percent)
LENGTH of TIME USING MMT? <ul style="list-style-type: none"> • < 6 months • 6 months – 23 months • 24 months – 84 months 	5 (17.9%) 9 (32.1%) 14 (50%)
NUMBER of TIMES STARTING MMT <ul style="list-style-type: none"> • 1 – 3 • 4 – 6 	25 (89.3%) 3 (10.7%)
DIFFICULTY STICKING with MMT? <ul style="list-style-type: none"> • Yes • No 	14 (50%) 14 (50%)
**REASONS for DIFFICULTY STICKING with MMT <ul style="list-style-type: none"> • Due to illness • No support (health care providers, family, friends) • I was not ready to start a program • Program full/ didn't start right away • I was still using opiates • No transportation • I would lose my income 	7 7 4 4 2 1 1
LENGTH of TIME with MMT BEFORE CARRIES <ul style="list-style-type: none"> • Carries allowed after a number of weeks on MMT • Carries allowed after a number of months on MMT • Carries never allowed 	21 (75%) 3 (10.7%) 4 (14.3%)

**Respondents may select more than one answer to the question

Of the 53 respondents, 28 (52.8%) identified themselves as having experience with MMT, 14 (50%) reported being in the program between 24 and 84 months with 25 (89.3%) having enrolled in MMT up to three different times. The number of individuals who did and did not experience difficulty sticking with an MMT program was split in half. The 28 respondents with MMT experience identified several reasons for difficulty sticking with an MMT program. For example, seven (25%) identified lack of supports,

seven (25%) cited illness, four (14.3%) were not ready to start the program, four (14.3%) stated the program was full or did not start right away, and two (7.1%) were still using opiates. Other reasons included lack of transportation and fear of losing their income. Although some insight into the details surrounding these answers was obtained in the focus group sessions, future studies focused on this area may provide useful information for improving services and possibly increasing enrolment and retention in MMT programs.

In addition to individuals' experience with MMT, data was also collected and analyzed regarding individuals in the community who may benefit from MMT but are not utilizing the services available to them. It is worth noting that 24 (45.3%) of the total sample indicated they had never accessed MMT services. Considering the overwhelming empirical evidence related to the benefits of MMT, it becomes extremely important to explore why opiate users would choose not to access these services; especially those available in their community. Based on an existing 14 question Opinions About Methadone Scale (OAM Scale), Kayman et al. (2006) developed a modified version using five of the questions (OAM5) shown to be most closely related to an individual's decision on whether or not to enter a MMT program and subsequently stay with a program. Chapter 3 details the OAM5 Scale analysis. Table 4 outlines the OAM5 Scale.

Table 4 OAM5 Scale

OAM5 Scale

1. It is safe to take methadone
2. Methadone takes away the craving for opiates like heroin and OxyContin.
3. With methadone, you can eventually get off of illegal drugs.
4. Methadone has proven to be the best way of quitting opiates like heroin and OxyContin.
5. Methadone helps us lead a normal life

Kayman et al. (2006)

Following Kayman et al (2006), this analysis attempted to reproduce the OAM5 Scale to assess the relationship between opinions about methadone and methadone use. The five key items were selected and reliability for the study was assessed. Results showed a Cronbach's Alpha of .816 which indicates the scale has strong reliability. The OAM5 scale scores were found to significantly correlate with methadone use: $r = .356^*$ and $p = .010$. In other words, opiate users with more favourable opinions about methadone are also more likely to be accessing MMT. It is unclear whether these favourable views influence opiate users to enter MMT programs or whether participation in these programs influences more favourable attitudes. Although this data only suggests a relationship between OAM and MMT enrolment, it is consistent with data presented by Kayman et al. (2006) which suggests a causal relationship between OAM and MMT use.

Respondents' Experiences and Satisfaction with MMT Health Services

In addition to questions regarding experience with MMT, respondents were also asked to rate their level of satisfaction with the MMT services they currently access.

Analysis of the survey questions regarding satisfaction with MMT services revealed that 17 (60.7%) of the 28 respondents were dissatisfied, nine (32.1%) were satisfied, and two (7.1%) did not respond. There is considerable evidence to support the provision of counselling as part of MMT programs as a key factor in successful outcomes, including retention in programs and reduction in rates of relapse (CAMH, 2008; CPSO, 2005; Gossop, Stewart & Marsden, 2006; Graham, 2007; RNAO, 2009). Guidelines exist for inclusion of counselling as part of MMT in Ontario (CPSO, 2005). However, responses to survey questions about counselling as part of their MMT program were as follows: 10 (35.7%) received counselling services within the MMT clinic, while

14 (50%) received no counselling at all. Furthermore, only 14 (50%) were offered structured counselling as part of their MMT program and just 13 (46.4%) were ever referred to counselling outside of their MMT program. Table 5 outlines participants' experience and satisfaction with MMT health services.

**Table 5: Respondents' Experiences and Satisfaction with MMT Health Services*,
N = 28**

VARIABLES	n (percent)
COUNSELING SERVICES PROVIDED as part of MMT? <ul style="list-style-type: none"> • Counselling services within the MMT clinic • Counselling services outside the MMT clinic • Referral to physicians • No services provided • No answer provided 	10 (35.7%) 1 (3.6%) 2 (7.2%) 14 (50%) 1 (3.6%)
WERE YOU EVER OFFERED STRUCTURED COUNSELING as PART of an MMT PROGRAM? <ul style="list-style-type: none"> • Yes • No / No answer provided 	14 (50%) 14 (50%)
REFERRED to COUNSELING OUTSIDE of an MMT PROGRAM? <ul style="list-style-type: none"> • Yes • No / Does not apply 	13 (46.4%) 15 (53.6%)
**REASONS MMT CLIENTS MISS APPOINTMENTS with HEALTH PROFESSIONALS <ul style="list-style-type: none"> • I forgot • I was too high / on the "nod" • I was too tired / sleeping • No transportation / no child care • I felt mistreated and/or disrespected by the health care provider • I didn't want them to know I was still using drugs 	10 (35.7%) 7 (25%) 2 (7.1%) 3 (10.7%) 2 (7.1%) 3 (10.7%)
HOW SATISFIED WERE YOU / ARE YOU WITH the MMT SERVICES YOU RECEIVED? <ul style="list-style-type: none"> • Satisfied • Dissatisfied • No answer provided 	9 (32.1%) 17 (60.7%) 2 (7.1%)

** Respondents may select more than one answer to the question

Reasons why individuals miss appointments with health care professionals, including MMT appointments, may be related to satisfaction and so are included in this section of analysis. When asked why clients miss their appointments, the following reasons were given; the majority of responses, 10 (35.7%), indicated that clients forgot

about their appointments, seven (25%) indicated they were too high or ‘on the nod’ (a physical response to using opiates), and three (10.7%) did not want the health care professional to know they were still using drugs. It is not uncommon for MMT clients to be using other drugs (cocaine, marijuana, etc.) while in a treatment program. A urinalysis may reveal the use of substances and may be grounds for dismissal from the program. Three respondents (10.7%) indicated no transportation or access to child care, and two (7.1%) did not attend due to lack of respect or feelings of judgment on the part of the health professional toward the client. It is important to note that respondents were able to choose more than one answer to this question. Understanding why clients miss appointments may help frontline workers identify ways to support clients and improve adherence to program policies.

Access to Health Care Services for Respondents

Substance abuse, including opiates, is defined by Pauly (2008) as a chronic illness of which relapse is common occurrence. When viewed as a long-term illness requiring medical attention versus a poor personal choice deserving of punitive consequences, physical and mental health issues associated with the illness and their management/treatment must be considered. Decisions about whether or not to seek medical attention starts with an individual’s assessment of his/her own health. For the purposes of this study, responses were separated into two categories; individuals currently access MMT and those who are not. Surprisingly, there was no significant difference between the two groups. Table 6 provides an overview of how respondents rated their overall health.

Table 6: Respondents' General Rating of Overall Health

VARIABLE	MMT <i>n</i> = 28	NON-MMT <i>n</i> = 25	<i>N</i> (percent) <i>N</i> = 53
GENERALLY SPEAKING, HOW WOULD YOU RATE YOUR OVERALL HEALTH?			
• Excellent	1 (3.57%)	1 (4%)	2 (3.8%)
• Very good	4 (14.2%)	3 (12%)	7 (13.2%)
• Good	10 (35.7%)	12 (48%)	22 (41.5%)
• Fair	7 (25%)	5 (20%)	12 (22.6%)
• Poor	6 (21.4%)	4 (16%)	10 (18.9%)

Overall, respondents rated their overall health as follows: two (3.8%) rated their health as excellent, seven (13.2%) as very good, 22 (41.5%) as good, 12 (22.6%) as fair and 10 (18.9%) as poor. In addition to the illness of addiction, there exists certain health conditions directly related to opiate use over the long term. The survey provided respondents with a list of common ailments associated with opiate use and invited them to indicate all medical conditions they felt applied to them as a result of their opiate use. Of the 53 respondents, nine (17%) selected open skin sores (abscess) which are common among IDUs, 10 (18.9%) experienced overdose, 14 (26.4%) indicated stomach problems, seven (13.2%) have experienced some type of Hepatitis infection, and two (3.8%) identified themselves as HIV positive.

Considering the mental and physical health challenges faced by chronic opiate users, it is important to understand what health care services are being accessed and where individuals go when they need medical attention. In order to ensure current services can meet the needs of these individuals, it is important to understand if other services (i.e. emergency rooms, walk-in clinics, etc) are fulfilling health care roles that may be best served by other means. Respondents were asked to identify which places they rely on most when sick or have a health problem. Table 7 outlines where individuals go for primary health care needs and acute medical issues.

Table 7: Health Services Accessed for Sickness/Health Problems by Respondents*, N=53

VARIABLE	<i>n</i> (percent)
WHICH PLACES DO YOU RELY ON MOST WHEN YOU ARE SICK/HAVE A HEALTH PROBLEM?	
• Hospital Emergency Room	28 (52.8%)
• Family Physician	28 (52.8%)
• Methadone Clinic	6 (11.3%)
• Walk-in Clinic	12 (22.6%)
• 'Other' (includes street nurse, family, friends)	12 (22.6%)

*Respondents may select more than one answer to the question

Respondents were also provided with a list of local health and social services and asked to select all they have accessed in the past 12 months. Methadone clients were compared with opiate users who are not currently accessing MMT. There was no significant difference between the two groups. Responses to this question varied. Table 8 outlines the responses based on the total sample size of 53 respondents.

Table 8: Local Health/Social Services Accessed by Respondents: Past 12 Months*, N = 53

VARIABLE	<i>n</i> (percent)
WHICH SERVICES HAVE YOU USED in the PAST 12 MONTHS?	
• Mental Health Programs	12 (22.6%)
• Needle Exchange Programs	18 (34%)
• Food Bank	31 (58.5%)
• Methadone Program	19 (35.8%)
• Addiction Programs	13 (24.5%)
• Meal Programs	24 (45.3%)
• Social Services (Ontario Works, Counselling)	24 (45.3%)
• Additional Services (detox, sex health, churches)	20 (37.7%)

*Respondents may select more than one answer to the question

The services most accessed by respondents were: local food banks (31, 58.5%), local meal programs (24, 45.3%), social services such as Ontario Works and counselling (24, 45.3%) and needle exchange programs (18, 34%). Mental health programs and addiction programs were also accessed (12, 22.6% and 13, 24.5% respectively).

The final closed-ended question on the survey asked respondents to rank the importance of the availability of a list of health services; some services listed are currently available in the community and some are not. For purposes of analysis, answers provided for the choices, ‘slightly important’ and ‘moderately important’ were collapsed into one response as well as the options, ‘very important’ with ‘extremely important’. Table 9 provides an overview of the information gathered from respondents regarding this question.

Table 9: How Important is it that the Following Services are easily Available to You?*, N=53

VARIABLE	Not Important	Slightly /Moderately Important	Very/Extremely Important	Total Responses
Safe Injection Site	7 (14.6%)	10 (20.8%)	31 (64.6%)	n = 48
Needle Park	19 (42.2%)	8 (17.8%)	18 (40%)	n = 45
Harm Reduction Drug Treatment	4 (8.3%)	12 (25%)	32 (66.7%)	n = 48
Clean Works	4 (9.1%)	6 (13.6%)	34 (77.3%)	n = 44
Drug Treatment - Abstinence	5 (10.9%)	12 (26.1%)	29 (63%)	n = 46
Medical Detox	2 (4.2%)	9 (18.8%)	37 (77.1%)	n = 48
Aboriginal Drug Treatment Center	5 (10.6%)	10 (21.3%)	32 (68.1%)	n = 47
Methadone Treatment Program	3 (6%)	6 (12%)	41 (82%)	n = 50
Nutritious Food Supplies	2 (4.2%)	4 (8.3%)	42 (87.5%)	n = 48
Street Outreach	0	13 (27.7%)	34 (72.3%)	n = 47
Needle Exchange	4 (8%)	7 (14%)	39 (78%)	n = 50
Overnight Shelters	2 (4.3%)	7 (14.9%)	38 (80.9%)	n = 47
Welfare/Ontario Works/ODSP	0	7 (14.6%)	41 (85.4%)	n = 48
Health Care Services	1 (2%)	14 (28.6%)	38 (77.6%)	n = 49
HIV Testing	3 (6%)	5 (10%)	42 (84%)	n = 50
Hepatitis Testing	2 (4.1%)	4 (8.2%)	43 (87.8%)	n = 49
Hepatitis B Vaccine	3 (6.5%)	4 (8.7%)	39 (84.8%)	n = 46
Birth Control	7 (15.6%)	5 (11.1%)	33 (73.3%)	n = 45
Free Condoms/Dental Dams	4 (8.3%)	7 (14.6%)	37 (77.1%)	n = 48

*Respondents may choose to answer more than one question *or* not at all

Of note are the highest ranking responses rated very/extremely important. These include nutritious food supplies (87.5%), Hepatitis testing (87%), Welfare/Ontario Works/Ontario Disability Services Program (ODSP) (85.4%), Hepatitis B Vaccine (84.8%), HIV testing (84%), methadone treatment program (82%), and overnight shelters (80.9%). On the other end of the scale were services rated as ‘not important’. The

highest response in this category was given to the suggestion of a needle park with 19 (42.4%) responses.

Open-ended Survey Questions

The final three questions on the survey were intended to give respondents an opportunity to comment and expand on some of the previous questions they had answered. Specifically, the questions asked for suggestions, opinions and input into: 1) how access to methadone treatment in the community might be improved, 2) how services available at local methadone clinics might be improved, and 3) any additional suggestions and comments respondents might like to share regarding needs, access to services, services in general, etc. Of the 53 respondents surveyed, 48 (90.6%) took the time to answer at least one of these questions. Respondents were able to answer one or more of the questions and some provided the same answer for questions one and two. For this reason, only the number of responses received for each common response/theme is reported and as such, no 'n' or percentage of 'n' is factored into the analysis. Rather, the number of responses for each common response/theme is given in descending order.

Twenty responses indicated improving access to current MMT services would involve better hours and/or longer hours of operation by the clinics. In addition, 15 similar responses, more hours/better hours/accommodation for clients who work, were stated for question two. Some of these responses were given by the same individual. It is interesting that the theme, 'better hours,' is seen by respondents as having the most impact on accessing and improving services at local MMT clinics. Similarly, respondents identified friendlier staff (17 responses in total) and additional MMT locations (15 responses in total) as important factors related to improving both access and

services. Table 10 summarizes common responses and themes identified from the answers provided.

Table 10: Answers to Open-ended Survey Questions Provided by Respondents*

QUESTIONS	RESPONSES / COMMON THEMES	Total Number of Responses
What, in your opinion, can be done to improve the access to methadone in your area?	Better hours/longer hours More locations in smaller towns Friendlier staff More information available on MMT Move the clinic for privacy Help with transportation More doctors at the clinics Offer additional health services at the clinics	20 12 11 5 4 3 3 1
What could be done to improve the services available to clients at the Methadone Clinics in Belleville?	More hours/better hours/accommodate people who work Friendlier staff More staff/ more doctors More clinics (locations) Offer additional health services at the clinics No wait time before starting the program Ensure clients take their methadone and are not selling it Info on additional health services in town	15 6 4 3 3 2 2 1
Finally, do you have any other comments / suggestions regarding your needs, access, services, etc. that you would like to mention? The following are some of the more representative responses to this question.	<ul style="list-style-type: none"> • Very helpful, very beneficial • Grateful for access to MMT services • Less waiting time. • Have staff who care • More addiction workers in Belleville • Should be able to walk into any clinic when it works with your schedule and get your drink • “We need a man’s shelter in Belleville” 	

*Respondents may choose to answer more than one question *or* not at all

Summary

Considering all of the survey data that was collected and analyzed, I was able to construct a general composite of the quality of life individuals who participated in the survey. A typical opiate user in small town Ontario would most likely be a Caucasian male in his 40s. His name is Bob. Bob is 43 and has an annual income below \$19,000. Bob is unable to work. He collects social assistance or is on long-term disability. Bob

survives because he has been receiving MMT for at least two years and accesses local food banks and other social services for monetary and emotional support on a fairly regular basis. Due to his substance use issues, Bob does not have access to carries and so schedules his time (seven days per week) around what time he can get to the clinic or pharmacy to get his drink. Bob does not own a car and cannot afford transit so he ‘bums’ rides, hitch-hikes and/or walks to get his methadone. When Bob has to keep his appointment with the MMT physician (once every two months) he must enter the clinic located on the main street in plain view of all the local shops and outlets. He feels exposed and vulnerable. Bob has lived in the area all of his life. Chances are high that he will meet someone he knows downtown and everyone knows you only go into ‘that’ building for one reason. Despite the challenges (stigma/ discrimination) Bob faces as a MMT patient, he is grateful. He is no longer an intravenous drug user. Although making it to the clinic seven days a week is difficult, to say the least, and Bob’s life is profoundly limited by finances, he knows how much worse things could actually be. He has already been there. For the moment, Bob would rather have his life revolve around getting to the clinic for his drink than trying to find ways (including illegal ways) to raise the cash to get his daily fix. He does not miss all of the things that go with that type of existence: poor mental and physical health, trouble with the law, fear of overdose, fear of contracting blood borne illness, etc. Being on MMT has given Bob a new start. His health is better (overall), and he is somewhat hopeful about his future. One response to the final open-ended survey question nicely sums up this chapter:

When our society can recognize that drug addiction is a social medical problem, then there will be progress.

The open-ended survey questions provided an opportunity for respondents to expand on their experiences with opiate use, MMT (where applicable), and some of the challenges and barriers they face on a regular basis. Although this information provided some insight into the human side of the issues, it was somewhat limited. The following chapter expands further on the personal experiences of respondents by presenting the results of the focus groups and key informant/community stakeholder interviews.

CHAPTER 5

QUALITATIVE RESULTS

Without the supplementation of qualitative data, there would be a lack of insight into how certain issues broadly impact a person's daily life. It becomes important to include qualitative research methods to obtain answers to questions on a broader level; especially when the research is focused on human problems and exploring ways to improve the quality of life for a population (Denzin & Lincoln, 2008). Therefore, interviewing opiate users for this study was necessary to provide context for the quantitative survey data. For example, failure to expand on the answers to the closed-ended survey questions for this study would have resulted in a limited understanding of experiences with current MMT programs from the perspective of opiate users in HPEC. To maintain confidentiality, all participants will be identified using pseudonyms. The following quote from one focus group participant illustrates the importance of including qualitative information. Jim expressed his experiences with opiate use and MMT by stating:

If you want to make yourself clean and keep yourself out of the criminal life, you can still be on methadone and still be part of criminal part of society. But at the same time, if you're on methadone, it helps you stay clear there 'cause you don't have to be out looking for illegal substances to make you not sick.

I'm not in jail because of my crimes, doin' whatever I had to do to make sure I had a pill to make sure I had money to buy dope. For one, I'm not sick all the time and I'm not using intravenously anymore.

The closed-ended survey questions did not provide an opportunity for respondents to provide answers beyond the options that were presented. In other words, there was no opportunity given for expanding on a response or on an idea. By agreeing to participate in a focus group session, opiate users contributed to the expansion of the survey data in a

meaningful way by placing questions about opiate addiction, their use of MMT to manage their addiction, and their satisfaction with the MMT programs available to them.

Survey research is well-established but can easily fall short on providing insight into the reasons why respondents choose the answers they do (Morgan, 1991).

Qualitative inquiry provides an opportunity for participants to explain why specific answers are chosen from those listed on a survey, thereby providing context and fuller meaning to the survey data. For example, several respondents indicated lack of transportation as a barrier to access to MMT services from a list provided on the survey. Without the addition of qualitative inquiry, responses to this question may have simply been presented as a one-dimensional statistic. This was most evident when a focus group session revealed that circumstances require some individuals to hitchhike from outlying areas twice a day, seven days per week, 365 days per year, regardless of weather conditions or their state of health, in order to make it to the clinic or pharmacy for their daily dose of methadone. Clearly, without this vital piece of contextual information, it would be difficult to consider all of the reasons why transportation may be an issue for individuals and to what degree this barrier to accessing MMT affects their daily lives. Thus, data collected from focus groups involving questions that expand on those asked on a survey can be used to enhance the overall study (Morgan, 1991).

Focus Group Data Analysis

As previously discussed in chapter 3, two focus group sessions took place at the local drop-in centre. Posters were provided to the local methadone clinics, the pharmacies that distribute methadone, local businesses and the Freedom Support Centre in order to recruit participants. Word of mouth was also used to encourage registration. Sign-up

sheets were available at the Freedom Support Center for persons who met the inclusion criteria which included individuals who were over 18 years of age, chronic illicit opiate users, and /or a past or present MMT client. Smaller numbers allow for more manageable focus group sessions and ensure there is enough time for all involved to have their input on the topic (Bowling & Ebrahim, 2007). Both sessions had six participants confirmed for attendance. Phone calls and face-to-face reminders were provided in the days prior to, and on the day of, each the session. Cash incentives of \$20 per person and a free meal may have played a role in their decision to take part in the study. All of the people who participated in the focus group sessions were receiving some sort of government assistance (welfare, Ontario Works, disability, etc.) and had yearly incomes below \$19,000 per year. Even with all of the preliminary preparation, attendance was low. For the first session, three of six registered participants attended. For the second session, four of six attended. What was even more disturbing was that, even though respondents were screened for eligibility, a total of four of the seven who attended had never used MMT and had limited experience with opiate use. Health issues, transportation, forgetfulness, and drug use may be some of the reasons that some participants were unable to attend. All of these were identified in the survey as reasons why opiate users miss appointments with health professionals.

The local street nurse, who services communities in Hastings and Prince Edward Counties, attended both focus group sessions in order to take notes and to provide assistance for the participants should they experience any emotional trauma during the interview. Prior to each session, the street nurse signed a Research Assistant Confidentiality Agreement, the Principle Investigator signed a Transcription

Confidentiality Agreement and each respondent signed a letter of informed consent. To confirm informed consent, the principal investigator explained the procedure at the beginning of each session, reiterating that confidentiality was paramount and that respondents could leave the session at any time with no penalty or negative consequence. All confidentiality documents were secured in a locked file cabinet in a locked office at the BFSC. Ground rules for each session were explained to ensure the sessions ran smoothly and each individual had equal opportunity for sharing their experiences. Specifically, participants were asked that only one person would speak at a time, no real names were to be used, and respect for differences of opinion was to be observed.

The sessions focused mainly on experiences with local MMT services. The questions asked were related to a participant's access to MMT services, their personal experience with MMT, opinions about MMT, and recommendations for improving MMT services available in Belleville, Ontario. However, due to the fact that not all participants had personal experiences with MMT, some questions were asked about other experiences with methadone including: 1) obtaining and using the drug illegally (on the street), 2) experience with friends who were receiving MMT and, 3) observations and opinions of MMT as part of their sub-culture. Sub-culture is formed when members of a population (community) deviate from the larger, social norms (Encyclopedia.com, 2011). In this case, although not all respondents are opiate users, 100% consume other illicit drugs on a regular basis and as such, are part of the drug sub-culture in the community which includes opiate users.

The focus group sessions were recorded using two digital recorders (Panasonic RR-US551 'Zoom Mic' and an Olympus Digital Voice Recorder VN-3100PC). The

audio recordings were transcribed verbatim. Each respondent was coded as follows, R1, R2, etc. No names or other means of identification were included in the written transcription of the data. Common themes were drawn from the responses. Answers were also grouped according to questions asked. The following analysis outlines the common themes gleaned from the data collected as well as answers according to the common questions asked.

Common Themes Gleaned from Answers to Guiding Questions

When asked what changes they would make to current MMT services available to them in Belleville, the responses were fairly consistent among the participants. A common concern among participants was that of feeling inferior to frontline nursing staff at the local clinics. These sentiments were reflected in responses to the open-ended survey questions where respondents were asked to offer suggestions for improving current services. Frontline nursing staff is responsible for greeting clients as they enter the facility, for administering certain drug screening tests and for dispensing prescribed doses of methadone to patients. Changes to front line staff was suggested by all who currently access local MMT services. In particular, MMT clients suggested that front line nurses should: 1) have more training on how to work with opiate addicts; 2) have some personal experience, if possible, in order to provide peer support; 3) have a background in outreach/street nursing; and 4) have a true passion for working with methadone patients versus just collecting a pay check. The attitude of the nursing staff clearly impacts the MMT clients' experiences. Jim described his experiences by stating:

I prefer to have more nursing staff this, say, like Frank (street nurse), that's actually been in our footsteps that have actually been there and know what we're experiencing. Not somebody to say, 'you never done opiates, well, I still want the job 'cause I'm an RN. Okay, you're an RN so we'll hire you 'cause you're an

RN', but you don't know what we're dealing with or why we're there for the methadone.

A similar response was provided by another MMT client, Kathy, who said:

The attitude of the staff really sucks. Like, it changes. Like, one day they're all cheery.

It's like, you gotta' walk in on egg shells. Okay, what's it gonna' be today? Are they in a mood or am I okay?

...just more compassion from staff and reasonability and um, just, people, like you said, that know what we're going through and have more compassion you know and not just look at us like we're a junkie and a piece of dirt you know like we're disgusting and ugh, you know...

Further, a third MMT client, Rachel, expressed her experiences this way:

I went to First Step. They said, "We don't want you here." They wouldn't even let me in. I guess they know me.

When asked about their access to MMT services and any barriers that may exist regarding access to MMT services, the following responses were consistent between the two sessions: 1) being refused treatment or terminated from of a program for bad behaviour; 2) limited hours of operation at the local clinics which affects a patient's ability to fit their daily visit to the clinic into a regular work schedule; 3) permission to have 'carries'; and 4) the health status of the patient due to other addiction and health issues. Participants responded to questions regarding access to MMT services in the following ways. For example, Jim described his experiences as:

I go to Kingston. I get my drink in Trenton (Hastings and Prince Edward Counties) but my doctor is in Kingston.

You can always get your drink. I mean, by law they have to give you your drink and take you into the program. I don't have a problem getting my drink it's just the staff attitude. I'm having trouble now with transportation 'cause I've been excused from the program at OATC 'cause of my attitude but that's because of their attitude was pushing me.

I blew up. Most people blow up there once or twice. I blew up six times there and I threw my urine on the floor and told her to test it now and I got excused from the program so I have to go to Kingston to see a doctor there and I have to travel to Trenton (from Belleville) to get my drink.

I have some past problems with Shoppers Drug Mart so I have to go to PharmaPlus to get my drink.

Kathy shared her challenges regarding access to services with this response:

When I was at the other clinic I found it really, really hard. You had to pay a fax fee and we're addicts. Like, we don't have money and being on ODSP and being on welfare we don't have 10 dollars or 20 dollars to pay for a fax or if we are late we gotta pay 20 dollars and if you don't have that you don't get your drink. That's how I got kicked off the program up there. If you are late for your appointment you get kicked off the program and you're done. You don't get your drink until you get another appointment and that could be a week or two weeks so anyway, yeah, that's why I got kicked off that program up there.

Even if you are like 10 minutes late getting there, you don't get to go in. That's at the other one. But down here (OATC) I find it a lot better in that aspect. I'm never late or anything like that. I make sure that I'm there.

Kathy was asked why she thought she was asked to pay for services. She responded:

I don't know. You tell me and we'll both know. They penalized me. The bill was like 50 dollars for faxes and me being late, like late appointments, and I don't have 50 dollars and that was it. I said, "So what, I gotta go be a junkie again?" and she said, "I don't care what you do. Be what you wanna' be. That's not my problem."

In addition to keeping scheduled appointments, Kathy's challenges regarding access also involved other health issues.

I'm HIV positive and I find it really hard to get up in the morning and get going. Sometimes my health makes me not want to get up and out of bed. I don't even want to move 'cause I'm in pain. So that's why I'm prescribed morphine and methadone. Days where I'm in pain. Know what I mean?

As well, Jim stated:

I think a lot of it in the beginning with the methadone too is being able to set time aside to go and get your drink. I mean, when you're an addict the first thing that comes in your mind is wanting to get high.

Rachel provided the following information about her experience with access to MMT services:

Well.... I gotta' go all the way up to the f**n pharmacy. Excuse my language. Just cause. I don't know why.

Rachel was not feeling well the day she participated in the focus group sessions.

Her input was sporadic and she was in and out of the room quite a bit. I probed the issues related to access further. Our brief conversation was as follows:

Rachel:

I only go there (clinic) once a week to pee.

Researcher:

Has it always been like that though? Just once a week and then up to the pharmacy for your drink?

Rachel:

Well, I see Dr. Pierce (not his real name) once every three months.

Researcher:

Would you prefer to get your drink at the clinic?

Rachel:

Yeah. They're ignorant. They tell you what to do. They're not friendly. You know that. The one nurse is a brat. I got in a fist fight one time with Dr. Pierce. He put me on a form 3.

Considerable evidence exists to support the inclusion of counselling to increase adherence with treatment protocols and retention in programs for patients receiving MMT (Gossop, Stewart, and Marsden, 2006; CPSO, 2005; RNAO, 2009). In fact, the Methadone Maintenance Guidelines (CPSO, 2005) clearly recommend regular counselling as an "integral part of methadone maintenance treatment" (p. 29). Furthermore, the document identifies the likelihood of concurrent disorders among MMT

patients and suggests physicians create a judgment-free, interdisciplinary environment in order to best serve their needs; thereby encouraging success with treatment strategies.

All focus group participants were asked if they had ever received counselling or been referred to counselling as part of their MMT program. Jim indicated that he has been on methadone for seven or eight years, Kathy for seven years, and Rachel for 15 years.

Participants answered queries about counselling in the follow ways. For example Jim stated:

No. And the reason for that is that the doctor that's at the methadone clinic here is also the one from jail so we have more of a jail relationship and I never had any kind of recommendation for counselling from any of them. I just get my dose checked, get my drink, and that's it.

Kathy:

The only problem I had was that I had to go get blood work done and if I didn't go get that blood work done I would have got cut off methadone. Now they're threatening me again cause I went and got my blood work done but they haven't got the paperwork yet. That's the only referral I've had; for blood work.

Rachel's response was simply: No.

Methadone is consumed orally by a patient. Dispensation of methadone prescribed for opiate withdrawal is highly controlled for many reasons. Patients with substance abuse problems need to be regularly monitored, especially in their early stages of treatment, to establish dosage, and to ensure no other illicit substances are being used concurrently (CPSO, 2011). Also, methadone has a value on the street. Many patients live with limited or fixed incomes and, as such, may be tempted to sell their methadone to supplement their income. Furthermore, as methadone is flavoured with a fruit juice, concern for accidental poisoning of young children is valid. Instances of youngsters dying from ingesting methadone carries have been reported (Government of British

Columbia, 2010; Moharib, 2009) Doctors may choose to allow patients who have been evaluated as medically and emotionally stabilized to take home several doses of methadone. These doses are referred to as ‘carries’. Patients who receive carries have fewer barriers related to access to MMT and are shown to have better treatment outcomes than those who are required to receive their medicine at a clinic or pharmacy seven days per week (CPSO, 2011). Inquiry into experiences with carries during the focus group sessions revealed the following.

Jim explained his experience with carries this way:

I did (have access to carries). Not now, I don’t. I was at level four. I had four carries a week. And now I have to start all over again.

You have to be clean for so long and your urine samples have to be clean every week that you go in. I was able to progress to four carries a week so, but like I said, after I had a ... I have to start all over again and start from no carries.

You set your day for how you want to do it. If you have your drink you don’t have to wait for the clinic to open to get your drink. If you have your carry, as soon as you get up you can take your drink and start your day. Whereas if you don’t have your carry, it doesn’t matter who you are, you still hurt and your main focus is gettin’ your carry. It doesn’t matter who you are, what your milligram is, it’s the first thing you think about having to get because your body is sore. It’s saying, “Get me your drink.”

Kathy’s experience with carries was quite different than Jim’s. She has never been granted carries although she has been accessing MMT services for seven years. She shared her experiences this way when I asked her if she had ever had access to carries:

Are you crazy? What’s a carry (ha ha)? So what if I’m suckin’ on a pipe (crack)! That’s none of your business (to Jim) or anybody else’s God damn business. They ain’t opiates and I don’t do needles anymore. That is what they’re lookin’ at and I’m not on methadone ‘cause I’m using crack. I’m on it ‘cause I’m a junkie.

No I have not (had access to carries). Unless they were someone else’s carries. There is no ‘ask’. You don’t apply. They decide.

...yeah. 'Cause then I wouldn't have to get up and go, you know what I mean, and I would be able to relax at home and whatever and walk my dogs and do whatever I want to do and be normal. You know what I mean? Instead of having think, okay, worry about gettin' up there.

With my illness (HIV) there are days when I don't want to get out of bed. (On weekends) I have to get down there by 11:00, by quarter to 11.

Similar to Jim and Kathy, Rachel has been on MMT for a very long time (15 years). Her response to this inquiry was similar to Kathy. She has never been granted carries. When asked if she thought carries were a good idea, her response was:

Sometimes. Like people have died from them. Kids die from them. Tastes like orange juice.

One respondent, Jeff, was never involved in a methadone program. However, when the group was asked who had tried methadone in the past, Jeff indicated that he had. His experience was related to acquiring methadone illegally and using it without a prescription. This acquisition is referred to as methadone diversion (CPSO, 2011). Jeff's story is important as it provides some insight into an element of methadone use which is of great concern. In 2005, the College of Physicians and Surgeons of Ontario (CPSO) reported that there were 194 fatalities related to methadone consumption in Ontario between 1996 and 2000. Of these, 154 were directly attributed to individuals consuming diverted methadone (CPSO, 2005). Jeff shared his experiences with diverted methadone.

I got it given to me by a friend. It was a trade. He traded me 2 – 15 ml bottles for 40 pieces of crack. And I was sick for three days. I only did 30 ml and I was sicker than a dog. I would never wish it on my worst enemies.

There are so many people who are double-doctorin' that stuff too, right. I mean, they get their drink and then they're doin' that same shit that they do every other time. They'll go out and get a pill or they'll go out and do whatever. They still do it. So I don't think it's being monitored as well as they think it is.

You know, they do their drink and it's not enough and they're saying that you can be cut off like that (snaps his fingers) like that! (Snaps his fingers again) You pee

dirty and you are done! Boom! There are people who have to have their drink 'cause I've seen some pretty sick people. I've seen him (my friend) get his methadone drink and he'll do four morphine pills right after it. I'm not kiddin' ya'. This guy does, he'll do 4 – 200 mg morphines...

What changes would you like to see made to MMT programs available in your community? Kathy responded by stating:

...and what I would really like to see changed is the waiting period. I'm an addict. I want help now not frickin' two weeks from now. I want help today. You know what I mean? In two weeks from now I could have a bottle of pills (street drugs) and be ok. It's just weird. It boggles my mind. You know what I mean? I mean, I'm sick today. I need help today, not two weeks from now when I could be in a different mind frame but it just doesn't work like that.

Long-term drug users are extremely knowledgeable about specific dosages for certain drugs and what dosage will provide them with what they require (Key Informant Interview, 2011). For example, Kathy has described herself as drug user who knows how much of which type of drug she would require to stave off dope sickness (withdrawal) or get high. She feels strongly about tailoring methadone dosage to individuals and expressed her concerns this way:

Kathy:

Another thing I just thought of too (recommendations for improving services). They only leave you go to 120 (mg). Like me, I'm sorry, I'm an old junkie. Like excuse the expression. Some of us need more than others! Like, I'm not gonna be rude. Well, take it the way you want but, like, I would intravenously inject. I was injecting 4 – 200 mg of morphine in one shot. That's a lot. And then you go down here you know. And they say, well you can only have 120 (mg)... you know that's not doing me anything. Like, it's keeping me from being sick till three or four in the morning. I'm suffering until I get down there to get my drink.

Kathy was asked to confirm that her current dose of methadone is 120 mg of methadone and that this is the highest amount she would be prescribed. She responded:

120 mg. That is what I'm on now. Yup. That's it. That's it. And then, on top of that, I gotta' have an EKG heart thing, and if I don't make that appointment, I'm cut off friggin' 120.

As previously mentioned, MMT is the gold standard for managing opiate addiction worldwide because: 1) it is cost effective, 2) it has few side effects, 3) it can be taken for years if necessary, and 4) when prescribed and used appropriately, it has been shown to reduce harms and improve quality of life (MOHLTC, 2007). It was important to ask participants about the positive side of MMT and what they thought it offered opiate users in Belleville, Ontario. Their responses to this question were as follows:

Kathy responded to the query first by stating:

I'm not sick. I know I'm not gonna be sick and that's it for me. The scariest thing I've had to go through in life man. One of the scariest. And I don't know. It's excruciating...you just don't know. If I had a gun, sometimes when I was sick, I would've blown my brains out and I'm not kidding. Like, that's how harsh it is. I don't know what you found.

Jim added to Kathy's comments:

I'm not doing crime, breaking laws, doing whatever to make money to get... I'm not in jail because of my crimes. Doin' whatever I had to do to make sure I had a pill to make sure I had money to buy dope. For one, I'm not sick all the time and I'm not using intravenously anymore. So that's two things.

Kathy agreed with Jim:

Yeah... we're not stealing and doing whatever to make money to get our pills.

Jim stated further that:

Methadone is a good program if that's what you want. If you want to make yourself clean and keep yourself out of the criminal life. You can still be on methadone and still be part of criminal part of society. But, at the same time, if you're on methadone, it helps you stay clear there 'cause you don't have to be out looking for illegal substances to make you not sick.

Don't have to pay for it. Like, if you're on any kind of Government assistance the Government pays for medications. So you don't have to worry about getting money unless you have to pay for it.

Jim raises a very good point. As long as MMT patients are receiving government social assistance, their drug costs (including MMT) are covered. However, Kathy responded to this statement with her own personal experiences and challenges related to being reliant on government assistance and what could happen if MMT clients fail to navigate the system appropriately.

...but if you're like me... If you don't have your drug card... Like me, I don't have a drug card. I haven't gotten my cheque yet. So, thank God I went up to disability and got my friggin' drug card dispensed to me anyway or I would've been screwed. I wouldn't have had a drink. Like, if you don't have six dollars, you ain't gettin' your drink! There's no compassion there either. You don't have your drug card, you don't have six bucks, you don't get your drink.

Given the earlier testament provided regarding dope sickness (withdrawal) and an opiate user's need for their medication, questions arise around what options might be available to MMT clients who for whatever reason, are unable to meet requirements to obtain their drink.

Participants who currently access MMT in Belleville were asked if they would recommend a MMT program to an opiate user. All of the participants strongly agreed that they would encourage someone who was addicted to prescription opiates or heroin to try methadone. The focus group sessions closed with a final invitation to participants to express any additional thoughts, suggestions, and experiences with methadone. Jim's response to this request provides a poignant closure to this section of the thesis:

I cleaned myself up. It's (methadone) what helped me stay clean. It's what keeps my life going. I mean, like I said, I was getting four carries a week. In a lot of aspects I was only out on the street maybe two days a week. The rest I'd be in jail and its good cause I don't have to chase whatever money I can get cause I gotta have dope.

My main concern is more compassion from the staff and more reasonability of them. I know we're responsible for our actions but at the same time, there has to be some lee way by the staff as well. Everybody makes mistakes. You just can't

have... you shouldn't always be punished for your mistakes if they're not great big mistakes. I don't know how else to put it.

You shouldn't be punished for everything you did in life 'cause some things aren't big enough to warrant that punishment.

Key Informant Interviews

Community-based research considers the many sides and perspectives of an issue as presented by those most affected. For this study, these perspectives were gathered during scheduled interviews with key informants. These individuals represented a wide range of knowledge/experiences with MMT services in the community. Through the taking of field notes during visitations to the drop-in support centre, and engaging in conversations with downtown business owners and community members, it became apparent early on in the study that including the perspectives and attitudes of these individuals on the subject of MMT, what it was, who it served, why it was/was not important to the community was vital. The key informants were identified by the researcher during the informal conversations and observations that took place over a period of five months. As previously stated in Chapter 3, key informants were approached in person or by telephone and invited to participate in an informal interview regarding MMT services offered in their community. All but one accepted the invitation. All conversations took place in a neutral, relaxed, environment mutually agreed upon by both parties. Confidentiality agreements were signed, and guiding questions were used to prompt the conversation (see Appendix L). No interviews were recorded. Rather, the researcher took detailed field notes and confirmed accuracy of the interpretation of the information throughout the interviews.

Without this data, it would have been difficult to place the issue of MMT services in the context of a smaller Ontario city. For example, some comments were made regarding the number of individuals who were noticed entering the downtown methadone clinic who were not from the area. Would this be an issue in a larger centre, such as Toronto or Montreal? Would the local business owners and community members be able to determine whether or not persons entering a clinic were from their city or not? These types of comments underline how visible MMT clients are and raise questions about anonymity and stigma.

All of the respondents identified MMT as an important health service. However, questions were raised about whether or not the current for-profit model is in the best interest of MMT clients, the health care system, and the community. Concerns were raised regarding the current monitoring of methadone clinics practices and doctor prescriptions for opiates such as oxycontin. Suggestions for improving the current system included better monitoring and accountability for the methadone clinics and establishing a standardized electronic monitoring system to track opiate prescriptions and reduce fraudulent prescriptions. Table 11 represents the common responses gleaned from the questions asked during these conversations and interviews.

Table 11. Guiding Questions and Common Responses by Key Informants

Questions	Common Responses by Key Informants
Do you believe MMT is an important community health service?	<p>All individuals answered, 'Yes' to this question.</p> <p>One health care individual used the word 'vital' to describe how important this service is to individuals and communities.</p> <p>Yes, if offered in a different setting – part of a public health care centre, clinic, or hospital.</p>
What are your opinions about methadone and what it is used for?	<p>Methadone treatment, when it is delivered well, allows people to stop using (drugs) and work toward improving their quality of life.</p> <p>Opiate users have few options available if they want to stop using drugs: cold turkey, wean themselves off, seek medical help (MMT)</p>
How well do you think current local MMT is working?	<p>Poorly Administered. Falls far below the best practices.</p> <p>Not working as well as it should. Necessary but lacking in complete care for clients – only provide methadone, period. Clients are supposed to get counselling for addiction and other issues but that's not happening.</p> <p>Does not appear to be any incentive to get clients off of methadone. There needs to be more monitoring and regulation of the clinics in the community. It works for the clinics more than it does for the clients.</p>
What recommendations would you make to improve local MMT services?	<p>Introduce not-for-profit clinics focused on holistic health care versus money.</p> <p>Improve access to care (transportation) and delivery of care (more time with physicians and referrals to other health care services).</p> <p>Ensure that methadone clinics are following Best Practices for delivering MMT – all clients meet criteria for receiving MMT as defined by the CPSO and clients receive more access to counselling for addiction and other issues</p> <p>Offer not-for-profit, Ministry funded methadone clinics through the LHINS as part of a Community Health Centre (CHC)</p> <p>There needs to be better monitoring/more regulation to stop people from selling their carries and have more emphasis on getting people off of methadone</p> <p>Improve clinic hours to allow MMT clients to access employment Eliminate unnecessary testing for Hep C. Ensure a level of care for those who test positive for HIV/Hep C Ensure concurrent disorders are being addressed (in-house or referral)</p> <p>Offer MMT in a medical arts building to reduce stigma</p> <p>Introduce a new electronic monitoring system to monitor prescriptions and reduce double-doctoring for opiates/methadone</p>
Additional Comments	<p>Keep the clinic in the downtown core but move it away from the main street Would be better as part of a hospital or other medical clinic MMT clients made their decisions on how to live and have to deal with the consequences</p> <p>Community has a lot of fear re: the downtown core and associate this with the methadone clinic People using the clinic who are not from Belleville Drug activity/drug culture = crime = reason to be fearful</p>

Summary

Despite the small sample size, the focus group sessions provided rich perspectives on all aspects of MMT services available to opiate users in a small Ontario city.

Although some participants were not MMT clients, their experiences and perspectives on methadone use outside of the legal realm were insightful and important for a more meaningful result. All of the concerns and observations expressed by the participants parallel those found in larger studies with some exceptions; notably transportation and clinic protocols and procedures. The key informant interviews provided insight into the opinions, attitudes, and perceptions about methadone and MMT services among health providers, community members and MMT clients.

The following discussion will summarize the research findings, highlight concerns regarding services available in smaller cities, and provide suggestions for improving current policies and treatment strategies in the community.

CHAPTER 6

DISCUSSION

This study attempted to understand the experiences and satisfaction with methadone maintenance treatment (MMT) services among opiate users residing in a small city in Ontario, Canada. The quantitative results of this study highlighted several demographic factors associated with opiate users in the city. For example, only 15 (27.8%) of the 53 respondents were female and the vast majority of 45 (84.9%) were Caucasian. An annual income below \$19,000 was a common denominator that applied to 47 (88.7%) of respondents who participated in the survey. Poverty and low socio-economic status are often associated with drug addiction (Registered Nurses Association of Ontario (RNAO), 2009); a statement that is also supported by this study.

More than half of the respondents ($n = 28$, 52.8%) were currently accessing MMT for opiate dependence at the time of the study. This means that there were 25 (47.2%) individuals who could have benefited from this local service but had never accessed the MMT programs available to them. The question then, becomes, “Why not?” If MMT is an effective medical treatment option available to these individuals, what is preventing them from taking advantage of these services? The answers to this important question are very complex. For example, some answers lie in the attitudes and perceptions among opiate users and community members in general regarding methadone, methadone clinics and what this type of drug and the drug treatment can or cannot do for an individual. Through key informant interviews, conversations with opiate users, and observations a lack of empathy, understanding, and fear surrounding methadone and opiate users by health providers and the general public was very apparent. These negative attitudes

surely affect how individuals who access MMT are treated by health workers and the public, and are also shown to influence the decision by non-MMT users to decline treatment (Simmonds & Coomber, 2009). Furthermore, the perception that local methadone clinics are more concerned with increasing revenues than providing care beyond a daily dose of methadone was prevalent among opiate users and key informants. Interviews with local business owners revealed the same ideas and perceptions about the local MMT clinics. Key informants also expressed a level of unease regarding the central location of the methadone clinic and the groups of people that gather each morning to wait for the clinic to open. Specifically, local business owners expressed their concerns for negative effects on the level of their business, property values, and the health of the downtown community as a whole. Community members expressed concerns about a clinic interfering with attempts to improve the image and beautification of the small downtown core.

On the other side of this issue are the MMT clients who are exposed and vulnerable while waiting for the clinic to open; well-aware of the stigma associated with their entering the facility. For example, several opiate users expressed their hesitation to enter into a MMT program for fear of being seen entering the clinic by someone they know. Some research has been conducted in Canada on the stigma associated with being part of a MMT program. Information gathered parallels results from this study in that MMT clients expressed feeling exposed and vulnerable in smaller areas where the chances of encountering individuals they know while entering a MMT facility are high (Anstice, Strike & Brands, 2009).

It is also important to consider the frontline health workers who interact with MMT clients on a regular basis. Providing care to patients who present with complex health issues can be challenging. The likelihood of negative interactions between frontline health workers and clients exists and is reported in the literature (RNAO, 2009; Anstice, Strike & Brands, 2009; Simmonds & Coomber, 2009). Lack of patience, tolerance, and compassion may be due to burn-out on the part of frontline health care workers. Some common concerns that were raised during focus group sessions and open-ended survey questions centred around interactions between frontline MMT workers, mostly nurses, and MMT clients. For example, 17 (60.7%) of the participants identified friendlier nursing staff as a key consideration for improving MMT services at the clinic they attend.

The Opinions About Methadone (OAM5) Scale used in this research confirmed that negative attitudes and opinions by non-MMT opiate users impacts their decision about whether to enter treatment. The public's perception of what methadone is and what it is used for appeared to be largely based on fear of the criminal element often associated with drug addiction in general. Furthermore, there is a perception that methadone clinics provide drugs to patients that get them high. These perceptions perpetuate the stigma faced by MMT clients (Simmonds & Coomber, 2009). What community members may fail to appreciate is that by entering into a MMT program, opiate users are taking important steps toward moving past a life pre-occupied with obtaining their next fix to avoid dope-sickness. Individuals who choose MMT over illicit opiate use are no longer required to find ways to obtain enough money to support their drug habits. This

translates into a reduction in petty crimes associated with illicit drug use (CSPO, 2011; MOHLTC, 2007).

On more than one occasion, members of the community exhibited a lack of understanding for addicts; over-simplifying their plight as being the direct result of bad choices made by individuals who must face the consequences of their actions. Moral judgement toward addicts often replaces the ability to see addiction as a complex physical/mental/social health issue (RNAO, 2009). Opiate users in smaller communities may deal with higher levels of stigma as opposed to larger, more anonymous locales. Situations where MMT clients are highly visible entering or leaving facilities that dispense methadone contributes to the level of stigma associated with being an opiate user and MMT client (Anstice, Strike & Brands, 2009). In addition to stigmatization by the general community, opiate users and MMT clients may also face intolerance by frontline health care providers (Anstice, Strike & Brands, 2009). Expressions of instances involving one, or both, of these situations were common among individuals who participated in this research study. Personal accounts of the same were also presented in a study of four methadone programs in Ontario, Canada (Anstice, Strike & Brands, 2009). To be fair, blanket assumptions and statements regarding the extent of stigma MMT clients face should not be applied to all MMT facilities and frontline workers who interact with clients. However, this issue surfaced often enough over the course of this study, as well as in the literature, to recommend investigation in order to identify the extent of discrimination and its effect on access to care and the level of care available to opiate users and MMT clients. In addition, studies focused specifically on

smaller locales would provide the means to compare current data on larger centers in order to identify any key differences that may exist between the two.

Being enrolled in MMT should allow individuals to begin a process of healing and provide them with supports geared to assist them to enter a life which may eventually be drug-free (CPSO, 2011). When asked to rate their levels of satisfaction, 17 (60.7%) respondents were dissatisfied with the current MMT services they were receiving. This may be related to the fact that 14 (50%) of the MMT respondents indicated they had never received counselling of any kind as part of their MMT program. Counselling is not only recommended by the CPSO as a vital component of MMT, but specific standards and guidelines are provided on how to offer this component of care, when to provide it and why counselling should be provided.

Access to carries (take-home doses of methadone) is another element of MMT programs identified by the CPSO (2011) as an important factor in retention and overall success. This is a controversial topic considering the potential for accidental overdose and fatal outcomes associated with diverted methadone. For this study, 21 (75%), of the 28 MMT clients received carries after only weeks on methadone while 4 (14.3%) never received this option. The CPSO (2011) recommends that MMT clients who are deemed medically/mentally stable be considered for receiving carries after eight weeks of monitored MMT. MMT patients are also required to show proper storage (locked box) precautions for the potentially lethal drug are in place. The CPSO (2011) also states that MMT programs with overly-restrictive take-home policies have lower rates of client retention. It would be worthwhile to understand if these statements are generalizable across the province, regardless of the size and location of a community.

There is considerable evidence showing a significant increase in prescription opiates over the past decade (Fischer, Gittins & Rehm, 2008). More importantly, the illegal use of prescription opiates by younger individuals who have never used heroin is on the rise in smaller centres (Fischer, Gittins & Rehm, 2008). Information collected for this study supports these findings. Several potential survey participants had to be excluded from the study because they were younger than 18 years. All potential respondents were briefly interviewed prior to completing a survey in order to verify their age and level of opiate use. If not for their age, many young adults would have qualified for the study. All indicated they were using prescription opiates exclusively. Also, 26 (49%) of survey respondents indicated using prescription opiates on a regular basis as opposed to just 7 (13.2%) who used heroin. Current MMT programs and services were originally designed to manage addiction to illicit opiates (heroin). There is not enough evidence to definitively state that these current treatments are the best/only option for this new trend in opiate use (CPSO, 2011).

Study Limitations

True community-based research (CBR) is subject to limitations by its very nature. Specifically, working with marginalized populations over a vast geographical area impacts the access to research subjects. For this study, access to the target population was not always guaranteed due to health issues, time management issues, and mental illness associated with drug addiction. As well, potential subjects may have known about the opportunity to participate in the study but did not have the transportation available on the days when the surveys and/or focus group sessions were offered. The drop-in centre received phone calls from individuals interested in participating in the study but who

were unable to secure transportation into Belleville on the days when the study was taking place.

The willingness of subjects to disclose personal information to persons they do not know or trust (including researchers) may be limited or non-existent. Trust is a relationship that is developed over time. As such, data collection associated with CBR studies may need to take place over longer periods of time. Networking with various community groups that support and service the target population may also prove challenging.

Due to the socio-economic status of the target population, potential research subjects may be more interested in the monetary incentives versus the research itself. As such, individuals may provide fraudulent information in order to receive money associated with participation in a study. This was observed once regarding completion of the survey and three times during the course of the focus group sessions.

Opinions and responses provided by respondents may be based on poor information and/or lack of education regarding the topic. For example, this was observed among non-MMT opiate users that completed the OAM-5 Scale, community stakeholders, and key informants. Inaccurate ideas, perceptions, and assumptions about methadone and MMT were prevalent and largely influenced how MMT clients were viewed and treated by frontline health workers and the general community.

This research was, in many ways, a starting point. It is difficult to know which questions to ask until without having spent time with the target population and observed them in their day to day lives. Similarly, it is difficult to know if public opinion is based on correct information. Spending time and speaking with members of the community

and health workers was necessary to determine their knowledge about methadone and MMT. It is only after spending time that suggestions for improving the level of understanding among community members and caregivers can be put forward.

One study is not sufficient for answering all of the questions that need to be answered. In fact, this study generated more questions than it answered. Gathering qualitative data is particularly challenging with CBR – especially CBR focused on marginalized populations. This study barely scratched the surface of the qualitative inquiry necessary to fully understand how current services, or lack thereof, impact the individuals who require them. Field notes and observations gathered during the course of this study strongly suggest more qualitative inquiry would be a vital component for any future studies in order to truly understand how to best serve the target population.

Recommendations and Future Studies

Future studies focused on ways to improve current MMT services and increase retention rates in smaller locales are warranted. The development of initiatives and strategies to care for individuals who require assistance with their prescription opiate dependence is also needed. Monitoring systems and policies are also needed across the province, and the country, to address the influx of prescription opiates into the illicit drug market before the associated health care and societal costs sky-rocket out of control. Investigation into the availability of ongoing support and relief for frontline staff may provide insight into how to maintain a more positive treatment environment for health providers and MMT clients. In addition to ensuring MMT best practices (provision of counselling and other social supports) are employed throughout the province, research

into exploring alternative treatment strategies and substitute therapies for opiate dependence, including prescription opiates, may be helpful.

Alternative treatments, such as Supervised Injection Facilities (SIF) have been shown to reduce crime rates, to improve injection practices which reduce harms to users and communities, and to reduce the number of emergency room visits for soft tissue trauma related to injection practices (Firestone-Cruz et al, 2007). The success of these controversial approaches is largely dependent on public opinion. For example, the perception by the general public that SIFs encourage drug use has been empirically proven to be false. However, the belief that SIFs invite this type of behaviour largely determines whether or not community leaders and policy makers present it as a viable option (Firestone-Cruz et al, 2007). This begs the question, ‘with the increased prescription opiate use, would similar facilities to monitor these opiate users be viable?’

Ongoing monitoring by organizations such as the CPSO and/or non-governmental agencies should be implemented to ensure accountability for any lack of provision of key services, including counselling and social supports for clients. Furthermore, the CPSO must be diligent in the enforcement of MMT standards and guidelines on behalf of MMT clients in the province of Ontario. MMT clients may not feel free to express their dissatisfaction with treatment by staff and the quality of care they receive for fear of being involuntarily withdrawn from a MMT program. This point was communicated repeatedly by MMT clients throughout the course of this research study. It would be important to compare the quality of care between large cities and smaller locales and identify any differences that may exist.

CHAPTER 7

CONCLUSION

Drug addiction is a medical/social condition with a long human history. As such, it is crucial for ongoing initiatives and strategies to assist individuals struggling with this complex, evolving issue. Input from community stakeholders, policy makers, and opiate users is crucial for success. Given the notable increase in dependence on prescription opiates, this study is timely. The results will not only benefit current treatment practices but may provide additional support for challenges specific to those programs operating in smaller locales including: access to care, quality of care, and stigma.

This study examined the current experiences and satisfaction with MMT services available to opiate users in a small Ontario city. Although the survey data provided important information regarding the characteristics and demographics of the sample population, without the qualitative component, this study would have been unable to accurately depict the circumstances surrounding the broader issues. Further qualitative inquiry to explore how opiate users' lives are affected by current MMT systems in smaller locales would be most beneficial in developing health care policies and treatment strategies for this very vulnerable population. Finally, based on the current trends in opiate use, studies are needed to gather statistical data regarding the number of individuals who are dependent on prescription opiates in small towns, how they access the drugs, and whether or not current MMT services are sufficient to deal with the problem.

Engaging in conversations with community members and conducting key informant interviews regarding their perceptions and opinions about having two

methadone clinics in the community provided a most interesting perspective. All key informants expressed similar positive views about the importance of having MMT services available in the community. Their opinions about the negative aspects were also unanimous. All interviewees expressed their concerns about the local clinics not being associated with a not for profit community health service. Specifically, the local hospital, health unit or other community-based health center were suggested as being more appropriate locations for MMT services. There was no discussion about removing the clinics altogether. Rather, this dialogue was centred on moving the existing downtown clinic to a less visible area of the city and whether or not the addition of a not-for-profit clinic in the community would be possible. These sentiments were also expressed by MMT clients who identified the clinic's location as a barrier to care on several occasions. It was very encouraging to hear all interested parties express their support for the presence of MMT services in the community. The only real questions raised about the local methadone clinics were around the quality of service being provided in a for-profit setting, and the location of the downtown clinic. Where the unanimous opinions ended was in regard to the individuals who receive methadone at the local clinics. It was very clear that the community members and business owners did not have a good understanding of the complexity of addiction. The lack of knowledge around addiction and how MMT works to assist those who are opiate dependent translated into a lack of compassion for MMT clients and their circumstances.

The next step toward improving care for this marginalized population may be to provide better information to communities where MMT services are available, and

encourage dialogue among all interested parties: health providers, clients, and community members, and policy makers.

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Appendices

Appendix A

April 5, 2010

**The Injection Drug Use
Harm Reduction Task Force
Hastings & Prince Edward**



179 North Park Street
Belleville, ON K8P 4P1

<http://www.hprhca.on.ca/Topics/AccidentalHarmReduction.php>

**Harm Reduction
saves...**

Members

Canadian Mental Health Association
Centre for Addiction and Mental Health
Hastings Childrens Aid Society
Motherwise
Addictions Centre
Alternatives for Women
Thuyendang Health Centre
Ontario Addiction Treatment Centre
Mental Health Services Hastings & Prince Edward
Gateway Community Health Centre
HIV/AIDS Regional Services
Street Health Centre
Hastings & Prince Edward Legal Services
United Networkers of Drug Users Nationally (UNDUN)
Hastings & Prince Edward Counties Health Unit
Loyalist College
Maggie's Resource Centre of North Hastings
Ontario Court, Provincial Division Criminal Court
Prince Edward, Lennox & Addington Social Services
Sexual Assault Centre
OPP Quinte West
OPP Centre Hastings
Youth Hub Quinte Inc.
Belleville Police Service
Hastings County Social Services
Quinte Healthcare
Three Oaks Foundation
The John Howard Society
Community Volunteer Pharmacists
Physicians
Concerned Individuals
Users and ex-users

To whom it may concern,

Lorri Taylor is a professor in the school of Health Sciences and Human Studies at Loyalist College in Belleville, Ontario. Lorri is currently working on her Masters Degree in Health Sciences (Community Health) at the University of Ontario Institute of Technology (UOIT).

As a resident of the Quinte area, Lorri has decided to conduct her research locally. She will be conducting an original research study on the health services available to local opiate users, with a focus on methadone maintenance treatment services. The title of her research study is: ***Effectiveness of Methadone Maintenance Treatment Services Currently Available for Opiate Users in Hastings and Prince Edward Counties***. The research will consist of a questionnaire and three focus group sessions. The research has received ethics approval from the Research Ethics Board at UOIT. Completion of the research study, including data collection and analysis, is scheduled for spring, 2011.

I have known Lorri Taylor for 18 months. She has attended several Harm Reduction Task Force meetings at the local health unit and is genuinely interested in serving her community. As Co-Chair of the Injection Drug Use Harm Reduction Task Force (of Hastings and Prince Edward Counties), I fully support this exciting, on-the-ground initiative.

Please feel free to contact me should you have any questions concerning my involvement with Lorri's community based research.

Sincerely,

Michael Piercy
613-392-2220
maureen.piercy@sympatico.ca
56 Orchard Lane
Quinte West, ON K8V 5P4

Appendix B

Thank you for participating in the following questionnaire. There may be some questions you do not feel comfortable answering. Please answer only those questions you want to.

QUESTIONNAIRE # _____

1. Gender
 - Male
 - Female
 - Transgender
 - Transsexual

2. How old are you?
 - Under 19
 - 19 – 29
 - 30 – 39
 - 40 – 49
 - 50 +

3. Many people identify with a specific ethnic or racial category. What is your racial or ethnic identification?
 - Aboriginal/ Native Canadian
 - Asian
 - Black
 - Mixed (specify e.g. Asian/Aboriginal) _____
 - White
 - Other (specify) _____

4. How would you describe your current relationship status (please check one)
 - None
 - Dating (casual relationships)
 - Current significant involvement, but don't live together
 - Current significant involvement, living with a partner

5. How many children (under the age of 19) including any adopted children or stepchildren do you have? _____ (number of children)

6. How many of them currently live with you? _____

7. What is the highest level of education you completed?
- Public school
 - High school
 - College or University
 - Other: _____
8. What was your total personal income (before taxes) for the 2009 tax year (January 2009 – December 2009)
- \$0 - \$19,000
 - \$20,000 - \$59,000
 - \$60,000 - \$99,000
 - \$100,000 +
9. In the last 12 months, where did you get your money from? Please check (✓) all that apply.
- Regular employment
 - Occasional employment
 - Unemployment insurance
 - Social assistance/ Welfare
 - Educational grant/Scholarship
 - Illegal activities
 - Sex trade/ prostitution
 - Other (specify _____)
10. Where do you live?
- Quinte West (Trenton)
 - Belleville
 - Picton
 - Other _____
11. How would you describe your housing situation in the last 12 months? Please check all that apply.

Housing	Check here
Shelter (specify _____)	
On the street	
Rent an apartment	
Rent a room	
Stay with friends	
Boarding house	
Own my own home	
Live with my parents	
Other (specify _____)	

12. Have you been homeless in the last 30 days? This includes couch surfing, sleeping outside, or sleeping at a shelter.

- No
- Yes → if yes, how many days out of the past 30 days were you homeless?
_____ (number of days)

The next set of questions will ask about your health and health care.

13. Generally speaking, how would you rate your overall health?

Would you say your health is

- Excellent
- Very good
- Good
- Fair
- Poor

14. Where do you usually go for health care? That is, which places do you rely on the most when you are sick or have a health problem? Please check all that apply (✓).

- Hospital Emergency Room
- Health Unit
- Family and Friends
- Family Physician
- Walk-in Clinic
- Pharmacist
- Methadone clinic
- Other (specify _____)

15. Do you have someone you can really count on to listen when you need to talk?

- No
- Yes (briefly describe relationship _____)

The next set of questions will ask you about your drug use.

16. Have you used opiates to get high in the past?

- Yes
- No

17. Do you currently use opiates to get high?

- Yes
- No

18. If yes, what kind of opiates do you use to get high?

- Heroin
- OxyContin (Including percocet/ percodan)
- Other _____
- Does not apply

19. Please indicate how you use the opiates mentioned in question 18.

- Injection
- Orally
- Snort
- Other _____
- Does not apply

20. In the past 12 months, about how often did you inject drugs?

- Does not apply
- Never
- Once in a while, not every week
- Once or twice a week
- Three times a week or more, but not every day
- Every day

21. In the last 12 months, did you inject drugs with needles or syringes already used by someone else, including your partner?

- Never
- Once only
- Sometimes
- Every time
- Does not apply

22. In the last 12 months, have you ever used other injecting equipment (spoons, filters, water or cotton) already used by someone else, including your partner?

- Never
- Once only
- Sometimes
- Every time
- Does not apply

23. Where do you get your needles and syringes from?

- Pharmacy with Needle Exchange Program
- Pharmacy without Needle Exchange Program
- Dealer
- Friend
- Needle exchange program (non-pharmacy site)
- Other (specify _____)

29. How many times in your lifetime have you started a Methadone Treatment program?

_____ number of times _____ never

30. Do you OR did you find it difficult to stick with the Methadone Treatment program?

- Yes
- No
- Does not apply

31. How long were you in the Methadone Maintenance Treatment program before you were able to have "carries"?

_____ # of weeks
_____ # of months
_____ carries were never allowed

- Does not apply

32. How often did you have access to structured counselling as part of your Methadone Treatment plan?

_____ times per week
_____ times per month
_____ never

33. Have you been referred to other counselling outside of the Methadone Maintenance Treatment program?

- Addictions Counselling
- Social Services
- Family Counselling
- Job Counselling
- Other (specify _____)
- Does Not Apply

34. How satisfied are you with the services you are currently receiving as part of your treatment at the Methadone Clinic?

- Very Dissatisfied
- Dissatisfied
- Satisfied
- Very Satisfied
- Does not apply

35. In the past, was it hard to stick with a Methadone Treatment program because of any of the following reasons? Please check all that apply (✓).

- I was ill and missed part of the program/treatment
- There was no ongoing counselling/ support available
- I was not ready for the program or treatment
- The program was culturally inappropriate
- I had no support from friends or family
- I would lose my income by entering into a program
- The program was full
- The program didn't start right away (e.g. when I was ready)
- I had no child care
- I had no way of getting there (bus tickets, transportation)
- I was unable to understand the instructions
- I didn't want them to know I was still using drugs
- I felt mistreated or judged negatively by the healthcare or service provider
- I felt the healthcare or service provider did not respect me
- Other: (Explain _____)

36. In the past 12 months, how often did you miss any of your appointments with physicians, nurses, counsellors or other service providers? Please circle the number.

- | | | | | |
|-------|-------------|---------------|------------|--------|
| 1 | 2 | 3 | 4 | 5 |
| Never | A few times | Half the time | Many times | Always |

37. The following are reasons why some clients receiving Methadone Treatment miss their appointments with doctors, nurses, counsellors or others. Did any of these apply to you?

- I forgot
- I was too high
- I was "on the nod"
- I was sleeping
- I was sleep deprived
- I had no bus tickets or other transportation
- I had no child care
- I was unable to understand the healthcare/ service provider's instructions
- I couldn't find the place
- I felt mistreated/ judged negatively by healthcare/service provider in past
- I felt the healthcare or service provider did not treat me with respect
- I didn't want them to know I was still using drugs
- Other: (Explain _____)

38. Please indicate all of the reasons why it is hard to stick to a Methadone program.

- I was ill
- I needed a program where I could continue to use other drugs
- Other people in the program were threatening me
- Other people in the program were using injection drugs
- Other people in the program wanted my carries
- Other people in the program were carrying weapons
- I was not ready for the program
- I had no support from friends or family
- I would lose my income by entering into the program
- The program didn't start right away (e.g. when I was ready)
- I had no child care
- It was difficult to get to the Doctor's for my appointments
- It was difficult to get to the pharmacy to get my methadone
- I couldn't "carry" any or enough of my doses
- I was unable to understand the instructions
- I felt mistreated / judged negatively by the healthcare or service provider
- I felt the healthcare or service provider did not respect me
- I was still using

The next set of questions will ask you about your access to Health Services

39. Below is a list of services available in the area. Which ones have you used in the past 12 months? Please check all that apply (✓).

- Medical care (family doctor, hospital / walk-in clinics, emergency room)
- Mental health programs (specify _____)
- Needle exchange
- Food bank
- Detox (regional services in Kingston)
- Methadone programs (___ in Belleville OR ___ outside of Belleville)
- Addiction programs (specify _____)
- Sexual health clinics (health unit)
- Meal programs
- Sexual assault center
- Self-help
- Social services (Ontario Works, Financial & Employment Counseling)
- Local Churches
- Other (specify _____)

40. Have you ever been denied access to OR been "banned" from any of the services listed?

- No
- Yes

If yes, please choose from the following list of reasons. Please check all that apply (v).

- You had criminal charges pending
- They said you were too high
- They said you were too threatening
- They said you were not cooperative
- You were suspected of getting the same prescription from more than one doctor
- You were suspected of re-selling your prescription once it was filled
- They said you were not ready for a program
- Other: (Explain _____)

41. Availability of services is important to people. Please rate how important it is to you that the following services (even if not available in your area) are EASILY available to you?

Types of Services	Not at all Important	Slightly Important	Moderately Important	Very Important	Extremely Important
Safe Injection Site					
Needle Park					
Harm Reduction Drug Treatment					
Clean Works					
Drug Treatment - - Abstinence					
Medical Detox					
Aboriginal Drug Treatment Center					
Methadone Treatment Program					
Nutritious Food Supplies					
Street Outreach					
Needle Exchange					
Overnight Shelters					
Welfare/ Ontario Works/ ODSP					
Health Care Services					
HIV Testing					
Hepatitis Testing					
Hepatitis B Vaccine					
Birth Control					
Free Condoms/ Dental Dams					

Other:

42. What, in your opinion, could be done to improve the access to methadone in Hastings and Prince Edward counties? For example: better hours, more locations, better locations, friendlier staff, etc.

43. What could be done to improve the services available to clients at the Methadone Clinic in Belleville?

44. Finally, do you have any other comments / suggestions regarding your needs, access, services, etc. that you would like to mention?

45. The following are questions from the “Opinions About Methadone”
Questionnaire.

Please provide a number at the end of each question to indicate your response based on the following:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = No opinion
- 4 = Agree
- 5 = Strongly Agree

Opinions About Methadone	Response (1 - 5)
1. It is safe to take methadone	
2. Taking methadone is only replacing one addiction with another	
3. It is better to use no medication than to take methadone	
4. Methadone takes away the craving for opiates like heroin and oxycotin	
5. With methadone, you can eventually get off of illegal drugs	
6. Methadone has proven to be the best way of quitting opiates like heroin and oxycontin.	
7. Methadone helps us lead a normal life	
8. Methadone programs help decrease illegal drug problems	
9. People are afraid to taper off of methadone	
10. My friends think it's practically impossible to get off of methadone	
11. Most people don't understand how hard it is to get off methadone	
12. I would feel empty without methadone or another drug	
13. Methadone programs sometimes act as agents for police	
14. Methadone programs help with the crime problem	

END OF QUESTIONNAIRE ☺

Thank you for your time and participation with this important research study.
You will receive \$20 (for time and travel) and a list of resources available in your community.

Appendix C

Sample of Guiding Questions for Focus Group Sessions

The following represent a sample of the types of guiding questions used during the Focus Group Sessions:

1. How many of you currently use opiates?
2. How many of you currently access MMT in Belleville (either OATC or First Step)?
3. How many of you are not currently accessing MMT in Belleville?
4. How many of you have tried MMT in the past but are not currently in a program?
5. For those of you currently accessing MMT in Belleville, what are the good things about the program?
6. For those of you currently accessing MMT in Belleville, what are some things about the program that you would change?
7. For those of you NOT currently accessing MMT in Belleville, why aren't you?
8. What would you say are some of the biggest barriers to receiving MMT in Belleville?

Appendix D



The University of Ontario Institute of Technology (UOIT) in partnership with the Hastings and Prince Edward Counties Injection Drug Use Harm Reduction Task Force are conducting research on MMT services.

**WE NEED YOUR INPUT
to
Improve Methadone Treatment Services in Your
Area!!**

We would like to gather information from individuals who might require Methadone Treatment and would be willing to provide us with information that could help improve services in your area.

A survey is available at Belleville Freedom Support Center
Every Tuesday & Thursday: 10:00 - 3:00
from June 11, 2010 to July 31, 2010.

Assistance with completion of the survey will be provided.

Eligible participants will receive \$20 for participating in the survey.
Your input is very valuable!

Thank you for your participation!



Appendix E



The University of Ontario Institute of Technology (UOIT) in partnership with the Hastings and Prince Edward Counties Injection Drug Use Harm Reduction Task Force are conducting research on MMT services.

Have you participated in the survey about Opiate Use and Methadone Treatment Services?

If you have, you are eligible to participate in one of two focus group sessions about the subject....

We would like to gather information from individuals who might require Methadone Treatment and would be willing to provide us with information that could help improve services in your area.

Focus Group Sessions will be held at Belleville Freedom Support Center

- Session 1: Tuesday, August 3 from 5:00 - 7:00 pm
- Session 2: Thursday, August 5 from 5:00 - 7:00 pm

Pizza and beverages will be served and \$20.00 will be paid to each eligible participant.

Each session is limited to a maximum of 8 people so please reserve your spot by adding your name to the sign in sheet.

Thank you for your participation!



Appendix F



Date: _____

Letter of Invitation

Title of Project: Effectiveness of Methadone Maintenance Treatment Services Available to Opiate Users in Hastings and Prince Edward Counties.

Introduction

A research project to evaluate the effectiveness of methadone maintenance treatment for opiate users in Hastings and Prince Edward Counties, Ontario is being conducted by University of Ontario Institute of Technology (UOIT) MHS student, Lorri Taylor and one Co-Principal Investigator, Dr. Robert Weaver, PhD, Faculty of Health Sciences at UOIT.

The purpose of the research project is to evaluate the effectiveness of methadone maintenance treatment programs currently available to opiate users in Hastings and Prince Edward Counties, Ontario. The objective of this study is to determine if treatment options currently being offered to opiate users in Hastings and Prince Edward Counties are meeting the health care needs of persons receiving methadone maintenance treatment.

You are being invited to participate in this study because you currently use opiates and may now, or in the future, require methadone maintenance treatment. You are invited to participate in the questionnaire provided at this location if you meet the following requirements:

- You are 18 years of age or older
- You have not already completed this survey
- You are not currently receiving methadone maintenance treatment outside of Hastings / Prince Edward Counties.

This study has been reviewed and has received Ethics approval through the Research Ethics Board (REB) at UOIT (File # 09-114). For further information regarding the REB process, please contact the REB Administration/Compliance Officer at: compliance@uoit.ca or 905-721-8668 ext. 3693.

If you have any questions regarding this research study, please contact Lorri Taylor at 613-969-1913 ext 2453.

Thank you very much for your participation in this research study.



The Injection Drug Use
Harm Reduction Task Force
Hastings & Prince Edward

Date: _____

Letter of Informed Consent

Title of Project: Effectiveness of Methadone Maintenance Treatment Services Available to Opiate Users in Hastings and Prince Edward Counties.

A research project to evaluate the effectiveness of methadone maintenance treatment (MMT) for opiate users in Hastings and Prince Edward Counties is being conducted by University of Ontario Institute of Technology (UOIT) MHS (candidate), Lorri Taylor and one Co-Principal Investigator, Dr. Robert Weaver, PhD, Faculty of Health Sciences at UOIT.

This study has received Ethics approval through the Research Ethics Board (REB) at UOIT (File # 09-114). For further information regarding the REB process, please contact the REB Administration/Compliance Officer at: compliance@uoit.ca or 905-721-8668 ext. 3693.

Participation in this study involves 25 minutes to complete a survey about your experience with MMT and current health services you receive. Your participation is voluntary. You may stop your participation at any time for any reason with no penalty or negative consequences. Your name will not appear on any form. There will be no way to link a participant with a survey. All data will be locked in a cabinet in the Co-Principal Investigator's office at UOIT and only the investigators will have access. Data will be kept for 3 years after first publication. After 3 years, all paper associated with the project will be shredded. No single individual will be referred to or identified in any written report.

This study will provide a better understanding of the effectiveness of MMT available in Hastings and Prince Edward Counties. Findings will be used to assist health providers and facility managers determine if current treatment practices are meeting the needs of the population and if additional treatment options should be considered. There are no known risks associated with participation in this study.

The street nurse will assist you with filling out the survey. You will receive \$20 for your time and you may stop at any time for any reason with no penalty. If you have any questions about the study or would like to know the results, please contact the investigators.

To confirm your willingness to participate in this study, please sign this consent form. Thank you for your time.

I acknowledge by signing this consent form that I will participate in the above study.

Participant Name (please print)

Date

Participant signature

Date



Appendix G



The Injection Drug Use
Harm Reduction Task Force
Hastings & Prince Edward

April 15, 2010.

Letter of Invitation

Title of Project: Effectiveness of Methadone Maintenance Treatment Services Available to Opiate Users in Hastings and Prince Edward Counties.

Introduction

A research project to evaluate the effectiveness of methadone maintenance treatment for illicit opiate users in Hastings and Prince Edward Counties, Ontario is being conducted by University of Ontario Institute of Technology (UOIT) MHSc student, Lorri Taylor and one Co-Principal Investigator, Dr. Robert Weaver, PhD, Faculty of Health Sciences at UOIT.

The purpose of the research project is to evaluate the effectiveness of methadone maintenance treatment programs currently available to opiate users in Hastings and Prince Edward Counties, Ontario. The objective of this study is to determine if treatment options currently being offered to opiate users in Hastings and Prince Edward Counties are meeting the health care needs of persons receiving methadone maintenance treatment.

You are being invited to participate in this study because you currently use opiates and may now, or in the future, require methadone maintenance treatment. This part of the study involves a focus group meeting where the researcher will openly ask questions to a group of no more than eight people. You are invited to attend one of three focus group sessions being offered at Belleville Club Freedom if you meet the following requirements:

- You are 18 years of age or older
- You have not already attended one of the three focus groups
- You are not currently receiving methadone maintenance treatment outside of Hastings / Prince Edward Counties.

The focus groups are being offered at Belleville Club Freedom on the following dates:

- Session 1: August 1 at 7:00 pm
- Session 2: August 3 at 7:00 pm

This study has been reviewed and has received Ethics approval through the Research Ethics Board (REB) at UOIT (File # 09-114). For further information regarding the REB process, please contact the REB Administration/Compliance Officer at: compliance@uoit.ca or 905-721-8668 ext. 3693.

Thank you very much for your participation in this research study.



April 15, 2010.



The Injection Drug Use
Harm Reduction Task Force
Hastings & Prince Edward

Letter of Informed Consent

Title of Project: Effectiveness of Methadone Maintenance Treatment Services Available to Opiate Users in Hastings and Prince Edward Counties.

A research project to evaluate the effectiveness of methadone maintenance treatment (MMT) for illicit opiate users in Hastings and Prince Edward Counties is being conducted by University of Ontario Institute of Technology (UOIT) MHSc (candidate), Lorri Taylor and one Co-Principal Investigator, Dr. Robert Weaver, PhD, Faculty of Health Sciences at UOIT.

This study has received Ethics approval through the Research Ethics Board (REB) at UOIT (File # 09-114). For further information regarding the REB process, please contact the REB Administration/Compliance Officer at: compliance@uoit.ca or 905-721-8668 ext. 3693.

Participation in this study involves your participation in a Focus Group Session about your experience with MMT and health services you receive. Your participation is voluntary. You may stop your participation at any time for any reason with no penalty or negative consequences. Your name will not appear on any form. The sessions will be audio taped and notes will be taken. All data will be transcribed and locked in a cabinet in the Co-Principal Investigator's office at UOIT. Only the investigators will have access. Data will be kept for 3 years after first publication. After 3 years, all paper associated with the project will be shredded. No single individual will be referred to or identified in any written report.

This study will provide a better understanding of the effectiveness of MMT available in Hastings and Prince Edward Counties to assist health providers and facility managers determine if current treatment practices are meeting the needs of the population and if additional treatment options should be considered. There are no known risks associated with participation in this study.

You will receive \$20 for your participation. You may choose to leave the focus group at any time with no penalty. If you have any questions about the study or would like to know the results, please contact the investigators.

To confirm your willingness to participate in this study, please sign this consent form. Thank you for your time.

I acknowledge by signing this consent form that I will participate in the above study.

Participant Name (please print)

Date

Participant signature

Date

Appendix H



Research Assistant Confidentiality Agreement

Project title: Effectiveness of Methadone Maintenance Treatment Services Available to Illicit Opiate Users in Hastings and Prince Edward Counties.

Researcher's Name: Lorri Taylor

Research Assistant's Name:

The questionnaire and focus group sessions you are helping to facilitate involve collection of information as part of a research project. This material may contain information of a very personal nature, which should be kept confidential and not disclosed to others. Maintaining this confidentiality is of utmost importance to the University, the participants, the researcher, and the Research Ethics Committees who have approved this research.

I request that you agree to the following:

- You will not disclose to others any information you may hear while facilitating completion of questionnaires or attending focus group sessions.
- You will not disclose to others the identity of any participants who fill out questionnaires or take part in any of the focus group sessions.

Declaration

I understand that:

1. I will only discuss the content of the questionnaires and focus group sessions with participants and the researcher.
2. I will not disclose to others the identity of any participants who fill out questionnaires or take part in any of the focus group sessions.

I agree to act according to the above constraints

Your name _____

Signature _____

Date _____

Appendix I



Focus Group Participant Confidentiality Agreement

Project title: Effectiveness of Methadone Maintenance Treatment Services Available to Illicit Opiate Users in Hastings and Prince Edward Counties.

Name of Focus Group Participant:

The audio recording and field notes taken during this Focus Group Session have been collected as part of a research project. This material may contain information of a very personal nature, which should be kept confidential and not disclosed to others. Maintaining this confidentiality is of utmost importance to the University, the participants, the researcher, and the Research Ethics Committees who have approved this research.

I willingly agree to the following:

- I will not disclose to others any information I may hear during this focus group session.
- I will not disclose to others the identity of any participants taking part in this focus group session.

Declaration

I understand that

1. I will only discuss the content of this focus group session with the researcher, the street nurse and other focus group participants.

I agree to act according to the above constraints

Your name _____

Signature _____

Date _____

(Based on and modified from the Transcription and Coding Confidentiality Form from Warwick University)

Appendix J



Transcription Confidentiality Agreement

Project title: Effectiveness of Methadone Maintenance Treatment Services Available to Illicit Opiate Users in Hastings and Prince Edward Counties.

Researcher's Name: _____

The audio recording you are transcribing has been collected as part of a research project. This material may contain information of a very personal nature, which should be kept confidential and not disclosed to others. Maintaining this confidentiality is of utmost importance to the University, the participants and the Research Ethics Committees who have approved this research

I request that you agree to the following:

- You will not disclose to others any information you may hear on the audio recording.
- The audio recording must be kept in a secure place where it cannot be heard or viewed by other people.
- Your transcription will be shown only to members of the research team.
- If you find that anyone on the audio recording is known to you (not including the research assistant), you will stop the transcription or coding work immediately and contact him/her.
- The written transcripts will be stored on a password protected computer.
- On completion of the transcription, the audio material and all computer files/written information will be sent to members of the research team. You will destroy your personal copy of this information once the research has been completed.

Declaration

I understand that:

1. I will only discuss the content of the audio recording with members of the research team.
2. I will keep the audio recording in a secure place where it cannot be seen/ heard by others.
3. Transcriptions will be stored on a password protected computer and only discussed them with the research team.
4. If any person on the audio recording is known to me (not including the research assistant), I will stop the transcription or coding work immediately and contact the research team.
5. Once the transcription work is completed I will delete/destroy copies of the transcripts/coding.

I agree to act according to the above constraints

Your name _____

Signature _____

Date _____

Based on and modified from the Transcription and Coding Confidentiality Form from Warwick University.

Appendix K

Letter of consent for Key Informant Interviews

November 6, 2010.

Letter of Informed Consent

Title of Project: Effectiveness of Methadone Maintenance Treatment Services Available to Illicit Opiate Users in Hastings and Prince Edward Counties.

A research project to evaluate the effectiveness of methadone maintenance treatment (MMT) for illicit opiate users in Hastings and Prince Edward Counties is being conducted by University of Ontario Institute of Technology (UOIT) MHSc (candidate), Lorri Taylor and one Co-Principal Investigator, Dr. Robert Weaver, PhD, Faculty of Health Sciences at UOIT.

This study has received Ethics approval through the Research Ethics Board (REB) at UOIT (File # 09-114). For further information regarding the REB process, please contact the REB Administration/Compliance Officer at: compliance@uoit.ca or 905-721-8668 ext. 3693.

Participation in this study involves your participation in a conversation about your experience and perspective regarding MMT services currently available in Hastings and Prince Edward Counties. Your participation is voluntary. You may stop your participation at any time for any reason with no penalty or negative consequences. Your name will not appear on any form. The sessions will not be audio taped however, field notes will be taken. All data will be transcribed by the Principal Investigator and locked in a cabinet at their residence until the completion of the research study at which time the data will be destroyed. No single individual will be referred to or identified in any written report.

This study will provide a better understanding of the effectiveness of MMT available in Hastings and Prince Edward Counties. Information gathered will assist health providers and facility managers determine if current treatment practices are meeting the needs of the population and if additional treatment options should be considered. Participation in this conversation will contribute a perspective that will help provide meaningful context for the study. There are no known risks associated with participation in this study.

There is no compensation for participation in this conversation. You may choose to stop the conversation at any time with no penalty. If you have any questions about the study or would like to know the results, please contact the investigators.

To confirm your willingness to participate in this conversation, please sign this consent form. Thank you for your time.

I acknowledge by signing this consent form that I will participate in the above study.

Participant Name (please print)

Date

Participant signature

Date

Appendix L

Sample of Guiding Questions for Key Informant Interviews

The following represent a sample of the types of guiding questions used during the Key Informant Interview sessions:

1. Do you believe methadone maintenance treatment (MMT) is an important health service?
2. What are your opinions about methadone and what it is used for?
3. How well do you think current local methadone treatment services are working?
4. What improvements do you feel need to be made to MMT services that are available locally?
5. What suggestions do you have for improving the MMT services that are available locally?
6. What are some other issues related to local MMT services that you feel are important?