

Personal Perceptions and Experiences of Methadone Maintenance Treatment: A Qualitative
Descriptive Research Study

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Abstract

Over the past ten years, there has been a consistent increase in opioid use, which has resulted in an increase in enrolment in methadone maintenance therapy [MMT]. With retention in MMT being a key factor, in order to understand the process of retention, it is important to gain an understanding of individual perceptions and experiences. No research in Ottawa, Ontario has addressed the perspective of MMT from people enrolled in MMT; therefore, nursing based research was undertaken. The objective was to understand the process and experiences associated with MMT from the perspective of persons who are enrolled in treatment. Twelve participants were engaged in semi-structured interviews. These participants described that, although MMT can positively affect the people who use such a treatment option, it continues to have a negative impact that repeatedly affects MMT initiation and delivery. The theoretical framework of Hardt and Negri's "Triple Imperative of Empire" was used to analyze the research participants' interviews within the current MMT program, to help develop a more inclusive healthcare service that addressed the current barriers hindering access and retention in treatment. The integration of this framework can help engage persons in treatment, tailor treatment to patient specific needs, and as a result increase access and retention in MMT programs.

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Chapter One- Statement of Problem

Introduction

Because it is associated with increased morbidity and pre-mature mortality related to HIV and Hepatitis C (HCV) acquisition, and trauma and death from overdose and suicide, opioid use can be considered a public health issue (World Health Organization [WHO], 2004; World Health Organization [WHO], 2009; Popova, Rehm, & Fischer, 2006). Compounding this situation is that, from 2002 to 2012, global estimates showed a 50% increase in opioid consumption, from 7,463 S-DDD¹ to 14,182 S-DDD (International Narcotics Control Board, 2013).

In Canada, between 2000 and 2004, the use of prescribed opioids similarly increased by 50%, resulting in estimates that there are more than 80,000 persons regularly consuming illicit opioids nation-wide, with 30,000 residing in Ontario (International Narcotics Control Board, 2006; Popova et al., 2006). More precisely, in Canada, the use of prescribed opioids increased from 20,990 S-DDD (2006-2008) to 29,743 S-DDD (2010-2012), meaning that Canada ranks second for prescription opioid use globally (International Narcotics Control Board, 2009; 2013).

With this increase in opioid distribution and use, “the number of persons enrolled in methadone maintenance treatment (MMT) in Ontario has risen substantially from approximately 7,800 persons in 2001 to 35,227 persons in 2011” (Fisher & Argento, 2012, p. 194). This has occurred, in part, because MMT is an effective opioid-substitution therapy for persons who are dependent on opiates (Brands, Marsh, Hart, & Jamieson, 2002; College of Physicians and Surgeons of Ontario [CPSO], 2011; Jamieson, 2002; WHO, 2004; Leavitt, 2003).

¹ Consumption of opioids, expressed in millions of defined daily doses for statistical purposes (S-DDD) (International Control Board, 2013). S-DDD is a fixed measure, defined as the assumed average maintenance dose per day for a drug used for its main indication in adults. It is a widely applied international metric that transforms the physical quantities of drugs into a standard unit of measure (Sketris et al., 2004).

To explain further, methadone was created as a long-acting analgesic and a non-addictive alternative to morphine by German scientists, who were looking to develop a pain reliever in the event of an opium shortage during the Second World War (Jamieson, 2002; Joseph, Standcliff, & Langrod, 2000). In the 1950s and 1960s, opioid use became a major social concern in urban areas because of increased crime and death rates attributed to opioid dependency. People who could not afford heroin resorted to crime to purchase the drug (Joseph et al., 2000). In the 1950s and 1960s in New York City, mortality related to opioid dependence, specifically the injection of heroin, increased from 7.2 to 35.8 per 10,000 deaths (Joseph et al., 2000). This dramatic increase in crime and death rates inspired researchers and physicians to find a solution for opioid dependence (CPSO, 2011). Thereafter, in the United Kingdom, methadone was recognized as an effective treatment for heroin withdrawal symptoms and as a means to address opioid dependence (CPSO, 2011).

The first methadone study by Nyswander and Dole occurred in 1964 at the Rockefeller Institute for Medical Research (Dole & Nyswander, 1965). Dole and Nyswander (1965) questioned the use of a prescribed narcotic to address heroin addiction (Dole & Nyswander, 1965). Their study consisted of three phases of methadone administration that occurred over 15 months of patient follow up from February 1964 to May 1965 (Dole & Nyswander, 1965). The first phase consisted of a 6-week maintenance phase where people were admitted into the hospital to be stabilized on methadone, during this time the participants were allowed to attend day-to-day activities with supervision (Dole & Nyswander, 1965). In the second phase, people were discharged from the hospital and received their daily dose of MMT from the clinic nurse; support was also provided to the participants to obtain employment, housing, and education (Dole & Nyswander, 1965). The goal of the third phase of Dole and Nyswander's (1965) study was to allow "ex-addicts to become socially normal and self-supporting in society" (Dole & Nyswander,

1965). Their study concluded that methadone, along with social support, prevented opioid withdrawal symptoms, blocked euphoria of heroin, and decreased withdrawal symptoms in people who were opioid dependent (Dole & Nyswander, 1965). This study served as the first official methadone clinic that became a model for subsequent maintenance clinics worldwide (Joseph et al., 2000; CPSO, 2011).

Of interest, nurses were involved in the Dole and Nyswander's (1965) study. It was mentioned in Dole and Nyswander's (1965) study that patients received their daily methadone dose in front of the clinic nurse (otherwise nurses were not mentioned throughout the study). Since this time, the role of nurses in MMT programs has grown to include MMT administration, maintenance, maintaining medical records, psychotherapeutic interventions, and providing liaison between patients and counsellors (Nelson, 1973; Dole & Nyswander, 1965; Dy, Howard, & Kleber, 1975). Nelson (1973) discussed the nurses' role and described it as a front-line healthcare professional who interacted with the patient on a daily basis and administered methadone doses. During this time, patients viewed nurses as being in a position of power, as they were the ones administering their methadone (Nelson, 1973). Nelson (1973) highlighted the importance of nurses being aware of their personal attitudes and beliefs. Indeed, with nurses being in a position of power, their actions towards their patients could have detrimental effects on MMT programs and patient outcomes (Nelson, 1973). Nelson (1973) explained that many people held a negative attitude toward persons with drug addiction, as a result of the negative feelings reinforced by society with the idea that "drug addicts are self-destructive" (p. 873), and 45 years later patients continue to feel marginalized and stigmatized from society.

Currently, this is still of concern for MMT programs (Anstice, Strike, Brands, 2009; Joseph et al., 2000; Lloyd, 2010). According to Joseph et al (2000), opioid substitution treatments, e.g., MMT, continue to be stigmatized because they appear to substitute one drug for

another, thus maintaining the idea that such programs perpetuate drug use. This idea stems from the perspective that the only way to achieve a drug-free state is with abstinence-based treatment (Registered Nurses Association of Ontario [RNAO], 2009).

In contrast, MMT is a harm reduction approach, which is aimed at decreasing the likelihood of unwanted consequences, with the philosophy that people should not be prevented from engaging in specific behaviour, but rather, that resources should be used to reduce the consequences of said behaviours (Canadian Nurses Association [CNA], 2011). The societal views of harm reduction influence the marginalization and stigmatization of harm reduction programs (Cheung, 2000). The prohibitionist reaction to drug use and drug users creates a vision that illicit drug use is morally corrupt behaviour and that this “immoral behaviour” needs to be controlled, “requiring a strong law-enforcement apparatus and a drug policy that declares war on drugs and heavily punishes drug users” (Cheung, 2000, p. 1698).

Therefore, persons who use illicit drugs are marginalized and discriminated against based on their behaviour and lack of self-care (Beirness, Jesseman, Notarandrea, Perron, 2008). The consequence is that persons who are dependent on opioids experience multiple sources of stigmatization, as a result affecting their physical and mental health (Anstice et al., 2009; Simmonds & Coomber, 2009). The discrimination that persons using MMT face can contribute to low self-esteem and status loss. Status loss occurs when people in a position of power exercise control over individuals and/or groups and participate in acts of stereotyping, labelling, and separating (setting them apart from others) (Link & Phelan, 2001). As a result, this process results in status loss which makes them feel like de-valued members in society and less worthy than others (Link & Phelan, 2001).

Stigmatization thus creates barriers to healthcare access and retention in treatment (Lloyd, 2010; Anstice et al., 2009), emphasizing the important role that nurses play in MMT delivery. As

nurses are often the first point of contact for persons who use illegal drugs, it is essential that nurses are aware of their personal beliefs and attitudes toward addiction to reduce the barriers to treatment initiation (RNAO, 2009).

Nevertheless, the use of opioid substitution treatment with MMT has become the treatment standard worldwide, and people continue to seek and receive treatment (CPSO, 2011). Methadone therapy is associated with positive social and health outcomes (Brands et al., 2002; CPSO, 2011; Jamieson, 2002) including reductions in substance abuse, criminal activity and recidivism, and transmission of diseases such as HIV and hepatitis (Gossop, Marsden, Stewart, Lehmann, & Strang, 1999; Villafranca, McKellar, Trafton, & Humphreys, 2006). Indeed, retention in treatment is associated with optimal outcomes (Mura, Nwakeze, & Demsky, 1998; Saxon, Wells, Fleming, Jackson, & Calsyn, 1996). Although significant improvement can be seen after two months of treatment initiation (Cacciola, Alterman, Rutherford, and McLellan, 1998), it has been suggested that retention in MMT for one year is optimal to achieve clinical benefits in most adult patients (Simpson et al., 1997). However, 50% of patient's drop out of treatment prior to one year of being enrolled (Ball & Ross, 1991; Hubbard et al., 1989). Factors that affect treatment dropout include appropriate dosing, utilization and availability of services, patient satisfaction, patient and system characteristics, and concurrent drug use (Mura et al., 1998; Saxon et al., 1996; Wideman et al., 1997). Problematically, early dropout from MMT results in increased illicit opioid use, criminal behaviour, injection drug use, sharing of needles and paraphernalia, and mortality from overdose (Davoli et al., 1993, Caplehorn, Dalton, Haldar, Petrenas, & Nisbet, 1996). Above all, meeting the needs of people in treatment is essential because, if they cease MMT, there is little opportunity to improve health (Brands et al., 2002).

Notwithstanding these research findings, there continues to be a lack of understanding from the perspective of the patients who are enrolled in treatment. Research on methadone

treatment dropout often focus on provider definitions, and does not include the patients' perspectives (McHugh, 2012). Individual perspectives and perceptions of the methadone process, including the initiation, stabilization, and maintenance phase of MMT, are an important factor to retention in MMT. Retention is not a fixed process driven purely by the patient; rather, it is a dynamic interaction between the patient and the treatment environment (Villafranca et al., 2006). Acknowledging this process and gaining a better understanding of individual perceptions and experiences with MMT could create a better comprehension of retention. Importantly, retention in care is a crucial aspect in MMT because prematurely dropping out of treatment is followed by adverse consequences; therefore, it is imperative to increase retention rates in MMT programs.

Research Objectives

- 1). To understand the process of methadone (including the initiation, stabilization, and maintenance phase of MMT) from the perspective of patients who are enrolled in MMT.
- 2). To understand the experiences associated with MMT from the perspective of persons who are in the maintenance phase of treatment to gain a better understanding of the process of retention.

Research Questions

- 1). What is the process associated with MMT from the perspectives of persons who are ≥ 6 weeks (as this is the maintenance phase) post MMT initiation?
- 2). What are the experiences associated with MMT from the perspectives of persons who are ≥ 6 weeks post MMT initiation?

Epistemological Stance

Paradigms are beliefs and practices that provide a lens for research (Weaver & Olsen, 2006). They help researchers structure inquiry, explain the philosophical assumptions underlying their methodological choices, and guide knowledge development (Weaver & Olsen, 2006). The epistemological stance of this thesis will be guided by critical theory. The perspective of critical

theory assumes that realities are constructed, and that meaning and truth are interpreted by social, political, cultural, gender, and economic factors (Weaver & Olsen, 2006). Critical theorists locate their ontology in these factors and in social infrastructures of oppression, injustice, and marginalization (Lincoln & Guba, 2003). Furthermore, an understanding of societal structures is needed to understand human behaviour because standards of truth or evidence are always social and structured by social, political, cultural, gender and economic factors that shape everyday life (Campbell & Bunting, 1991; Kincheloe & McLaren, 2003).

The methodological stance of critical theory holds the idea that knowledge is created and grounded in language, which requires interpretation (Weaver & Olsen, 2006). Moreover, critical theorists understand that language is not a direct reflection of society; it is a social practice in which the meaning of language can change depending on context (Kincheloe & McLaren, 2003). Within research, the purpose of critical interpretation is to reveal the dynamics of power within the social and cultural context, and to develop an understanding of people regarding the social and psychological forces that make them who they are (Kincheloe & McLaren, 2003).

Critical theorists believe that knowledge is actively constructed and created by human consciousness and knowledge is subjectively and contextually located (Lincoln & Guba, 2003). Inquiry in critical theory empowers researchers to discover the complexity and construction of humans' consciousness (Kincheloe & McLaren, 2003). Meanings are co-created between the researcher and participants, and that understanding this shared meaning can expose oppression (Campbell & Bunting, 1991). That is, critical theory helps reveal inequities and power imbalances with a goal to allow the voices of marginalized populations to be heard (Campbell & Bunting, 1991; Davies & Logan, 2012; Kincheloe & McLaren, 2003).

In relation to this research, an epistemology that is informed by critical theory is important because extant research highlights that people enrolled in MMT experience multiple

sources of stigmatization and inequities. People who use illicit substances are stigmatized from society and viewed as less worthy, ineligible, and less deserving, causing an imbalance in power between the stigmatized and the persons in positions of power (Ahern, Stuber, & Galea, 2007; Simmonds & Coomber, 2009). As a result, there is separation, status loss, and discrimination (Link & Phelan, 2001), which impedes treatment-seeking behaviour and creates barriers to treatment access, retention and success within MMT (Vigilant, 2004). Critical researchers work toward exposing these powers that prevent people and/or groups from shaping decisions that affect their lives (Kincheloe & McLaren, 2003), such as not seeking treatment and pre-mature treatment termination. In addition, critical researchers are concerned with power and injustice and work to identify power interests between different groups within a society, and to understand varying power roles (Kincheloe & McLaren, 2003). Furthermore, critical theorists seek liberation in situations of domination and oppression (Kincheloe & McLaren, 2003).

Lastly, critical theory works towards exposing hidden power imbalances by gaining understanding through critical engagement. It is an action research approach to subjectively learn peoples' life problems, and to make it public knowledge (Weaver & Olsen, 2006). The purpose of critical theory is to represent under-represented views with the research inquiry of emancipation (Weaver & Olsen, 2006). It focuses on the way people think and act and how social circumstances can influence thoughts and actions (Kincheloe & McLaren, 2003). This qualitative research study will highlight participants' experiences and perspectives in a way that emphasizes the participants as experts (Polit & Beck, 2012). The focus of the critical theory paradigm is practical knowledge: "knowledge to help understand or change the social world" (Weaver & Olsen, 2006, p. 462). It strives to understand the meaning of human context and symbolic expressions, and to engage marginalized people (Kincheloe & McLaren, 2003). Having a better

understanding of people's experiences with MMT can help address the stigmatization associated with accessing treatment and healthcare therefore, increasing retention rates.

Chapter Two- Literature Review

Substance and Opioid Dependence

Substance Dependence. Substance use disorders, colloquially known as addiction, is the continuous use of a substance, despite substance-related problems, combined with a cluster of cognitive, behavioural and physiological symptoms (American Psychiatric Association [APA], 2013). Substance use disorders can be applied to 10 classes of substances including, “alcohol, cannabis, phencyclidine, other hallucinogens, inhalants, opioids, sedatives (including hypnotics and anxiolytics), stimulants, tobacco, and an unknown class” (APA, 2013, p. 482). Symptoms of dependence are similar across the various categories (APA, 2013). Caffeine is excluded as a substance associated with a substance use disorder because there is insufficient evidence to conclude that there is a caffeine use disorder, plus its prevalence is unknown (APA, 2013). Continuous use of a substance can result in tolerance, withdrawal, and compulsive drug taking behaviour (APA, 2013). According to the APA (2013), dependence can be defined when three or more symptoms occur anytime within a 12-month period. The following are symptoms related to dependence: tolerance, withdrawal, using a substance to subside feelings of withdrawal, and compulsive substance use involving taking the substance in larger amounts or over longer periods of time, failed attempts to stop or minimize substance use, and spending copious amounts of time obtaining, using, or recovering from substance effects (APA, 2013). Furthermore, as part of substance dependence, a substance must affect the individual’s social life, and, despite recognizing the psychological and physical effects the substance has on the individual, he/she continues to use the substance (APA, 2013). Lastly, substance dependence is like any other chronic disorder, and is therefore treatable (Isaac, Kalvick, Brands, & Janecek, 2004).

Classification of Opioids. Opioids, a class of drug with morphine-like abilities, bind to opioid receptors in the body (Darke, 2011; Selby & Kahan, 2011). The natural compounds derived from the natural product of the opium poppy plant are known as opiates, which include morphine and codeine (Selby & Kahan, 2011). The isolation of morphine and codeine, in 1806 and 1832, respectively, led to the development of semi-synthetic and synthetic substances with morphine like effects. In addition to heroin (semi-synthetic), this class includes morphine, oxycodone, fentanyl, and codeine. Furthermore, opioids have a long history of both medicinal and recreational purposes. Three key events include (a) the isolation of morphine, (b) the invention of the syringe, and (c) the synthesis of heroin in 1874, all of which corresponded with an increase in the use of opiates during the 19th century (Darke, 2011). Because opioids bind to opioid receptors in the body, they are used as an analgesic and are agonists of neuron receptors that can induce drowsiness and sleep (Darke, 2011). In addition, the psychoactive effects of opioids range drastically, “from mild mood altering to profound euphoria and inner peace” (Selby & Kahan, 2011, p. 18). With this in mind, one of the major side effects of opioids is the development of opioid dependence.

Diagnosis and Treatment of Opioid Use Disorders

Opioid Use Disorder. A substance use disorder, including opioid use disorder, can be a long-lasting disorder, which can result in distress and disability (Isaac et al., 2004). The prevalence of opioid use disorders for adults older than 18 years of age in the community population is 0.37%; “this may be underestimated because of the larger number of incarcerated individuals with opioid use disorders” (Compton, Dawson, Duffy, & Grant, 2010 as cited in APA, 2013, p. 543). People can be dependent on all different classes of opioids, including natural opioids (Morphine), semisynthetics (Heroin), and synthetics with morphine-like action (Fentanyl). The defining characteristic of opioid dependence is the compulsive use of opioids,

which, in most cases, leads to tolerance, physical dependence, and withdrawal (Isaac et al., 2004). Opioids can be prescribed as analgesics, anaesthetics, antidiarrheal agents, or cough suppressants (APA, 2013). It can be difficult to diagnose opioid dependence because tolerance and/or withdrawal are not enough to delineate opioid dependence (Isaac et al., 2004). People who use opioids for management of chronic pain will develop tolerance and will experience withdrawal symptoms if the drug is abruptly discontinued, but do not meet the criteria of opioid dependence because people need to display compulsive use of opioids to be diagnosed as opioid dependent (Isaac et al., 2004; APA, 2013). Most importantly:

Opioid dependence includes signs and symptoms that reflect compulsive, prolonged self-administration of opioid substances that are used for no legitimate medical purpose or, if a general medical condition is present that requires opioid treatment, that are used in doses that are greatly in excess of the amount needed for pain relief. (APA, 2013, p. 542)

The development of opioid dependence involves multiple factors, such as psychological, social, biological, and the type of opioid use (the pharmacological makeup) (Isaac et al., 2004).

As a result, effective prevention and treatment requires that all of these factors are addressed consistently. Substance abuse is diagnosed as:

A maladaptive pattern of substance use, leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period: 1) Opioids are often taken in larger amounts, or over longer periods than was intended; 2) Persistent desire to cut down or unsuccessful efforts to cut down or control substance use; 3) A great deal of time is spent in activities necessary to obtain the opioid, use the opioid, or recover from its effects. 4) Craving, or a strong desire or urge to use opioids. 5) Recurrent opioid use resulting in a failure to fulfill major role obligations at work, school, or home. 6) Continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of opioids. 7) Important social, occupational, or recreational activities are given up or reduced because of opioid use. 8) Important social, occupational, or recreational activities are given up or reduced because of opioid use. 9) Continued opioid use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance. 10) Tolerance, as defined by either of the following a) A need for markedly increased amounts of opioids to achieve intoxication or desired effect. b) A markedly diminished effect with continued use of the same amount of an opioid. 11) Withdrawal, as manifested by either of the following: a) The characteristic

opioid withdrawal syndrome, b) Opioids (or a closely related substance) are taken to relieve or avoid withdrawal symptoms. (APA, 2013, p. 541)

There are multiple treatment options for opioid use disorders including Buprenorphine-naloxone (Suboxone), Methadone Maintenance Treatment [MMT], opioid substitution tapering, supervised injection sites, medically supervised administration of opiates including diacetylmorphine (medically supervised heroin) and hydromorphone (HDM), and abstinence-based treatment (CPSO, 2011).

Currently, there are two opioid agonist treatments available in Canada, Methadone and Suboxone. Methadone, a full mu-opioid agonist drug, is recommended for persons who are dependent on opioids and who have had an extended period of opioid use (CPSO, 2011; WHO, 2004). Methadone can be used as a substitution maintenance treatment or for detoxification and the management of opioid withdrawal (Brands et al., 2002). In addition, MMT can be a long-term treatment, which lasts for one to two years, or it can last for 20 years or more; this is possible because prolonged methadone treatment is safe and effective (CPSO, 2011; WHO, 2004). The length of MMT is a decision made between persons using MMT and their prescribing clinicians (CPSO, 2011; WHO, 2004).

Similarly, Suboxone, a sublingual partial mu opioid agonist, is a drug that reduces symptoms and cravings for 24 hours (CPSO, 2011; Bonhomme, Shim, Gooden, Tyus, & Rust, 2012). Suboxone therapy is based on individual patient factors and the maximum daily dose of administration is 24 mg. For people who use larger doses of opioids, MMT would be the preferred option (CPSO, 2011). The difference between MMT and Suboxone in Canada is that physicians do not need a special licence to prescribe Suboxone, although, it is a controlled substance (CPSO, 2011). Nevertheless, the College of Physicians and Surgeons of Ontario (2011) expects that physicians who are prescribing this medication will do so with the

appropriate knowledge, skill, and judgement to be competent and safe. In addition, Suboxone, unlike MMT, is associated with less stigma because it is less known to the community (Bonhomme et al., 2012). Currently, there is insufficient evidence that Suboxone is more efficacious than MMT; it is based on patient factors and preferences (CPSO, 2011).

Harm Reduction and its Involvement in Substance Abuse

In 1968, addiction was first classified as a disease, and was thus deemed to require professional help (Michels & Stover, 2012). People who had alcohol or drug dependence were not recognized to have legal rights to counselling, detoxification treatment, and aftercare until after this designation (Michels & Stover, 2012). In addition, prior to the 1970s, drug treatment modalities consisted of criminalization, incarceration, and a mandated total-abstinence based approach on the ethical principles of Alcoholics Anonymous (Skoll, 1992; Valverde, 1998; Valverde & White-Mair, 1999). It was not until the 1970s when the first harm reduction approach, related to drug use, was developed, among Dutch heroin users (Gowan, Whetstone, & Andic, 2012). This approach related to drug use negotiated decriminalization, prescription of MMT, and the provision of clean needles and syringes, which rapidly spread into a national federation (Gowan et al., 2012). For the last 10 to 15 years, harm reduction thus became the an often preferred method of providing treatment for people with substance abuse, compared to the “traditional” abstinence-orientated drug addiction treatment modality (Järvinen, 2008).

Harm reduction, as defined by the Canadian Center on Substance Abuse (CCSA, 2008), “focuses on those policies, programs and interventions that seek to reduce or minimize the adverse health and social consequences of drug use without requiring an individual to discontinue drug use” (p. 2). Drug use related dependency can seriously impair the quality of life of the individual, their families, and evidence has accumulated over the past decades that explicate the substantial risks of deaths and diseases that are associated with this practice (Michels & Stover,

2012; Ritter & Cameron, 2006). Reducing these risks are thus a major part of the primary health care approach to providing health for all. Harm reduction approaches recognize that drugs in society are to be expected, and that reducing the harm associated with the behaviour is a more pragmatic and feasible option. As part of harm reduction philosophy, therefore, no moralistic judgments are made about an individual's lifestyle. Instead it acknowledges respect and dignity of the individual (CNA, 2011), and a harm reduction philosophy can be an adopted approach by many different practices, and provides a humane client-centered approach.

Historically, harm reduction was rejected socially due to the discrimination of the term 'reducing harm' (Single, 1995). Since this time, although more well accepted and implemented, harm reduction continues to have hardships politically and socially with the misconceptions of disrespect and violence associated with the title (Mangham, 2001). Harm reduction challenges the claims that abstinence and law enforcement are the only morally acceptable solutions to drug problems (Khoshnood, 2007). Harm reduction and abstinence-based philosophy are opposing; harm reduction is viewed as a negative concept due to the belief that harm reduction does not promote abstinence (Neale et al., 2010). However, there is a misconception of the philosophy of harm reduction in society, harm reduction maintains a value-neutral and humanistic view of drug use and the user, and neither insists on nor objects to abstinence (Cheung, 2000). Moreover, harm reduction acknowledges the active role of the user in harm reduction programs and values the realistic acceptance that many people are unable to or unwilling to stop using illicit drugs (Cheung, 2000). Although harm reduction challenges the claims that abstinence and law enforcement are the only morally acceptable solutions to the current drug problems, harm reduction is, "establishing a complementary relation between harm reduction programs and abstinence-oriented treatment" (Cheung, 2000, p. 1699). Harm reduction ultimately values recovery, whether the end goal is abstinence or medically treated stabilization of the addiction.

Moreover, the public view of the prohibition of drugs assumes that illicit drug use is morally corrupt behaviour, one that violates the integrity of the community (Cheung, 2000), and negatively influences the uptake and acceptance of harm reduction programs. There are people who view harm reduction as a positive way to minimize the damage of drug use and others who view it as an approach that encourages illicit drug use (Bernies et al., 2008). A major challenge in applying a public health approach to addictions is the negative social evaluation, or stigma, attached to those who use illicit substances (Hathaway, 2005). This aspect introduces confusion over what harm reduction actually refers to, as well as controversy over the implications of different versions of harm reduction programs (Single, 1995). People viewed the harm reduction program of institutionalized sterile syringe and HIV testing, by believing that the program ignored the structural inequalities that shaped addiction in the first place, as being neglectful and lacking compassion (Gowan et al., 2012).

Although the harm reduction approach has been the most prominent in the field of illicit drug use, it continues to be the most controversial, and this occurs, in part, due to misperceptions that harm reduction condones and promotes drug use, therefore increasing drug problems (CCSA, 2005; Single, 1995). For example, currently in Canada, the National Anti-Drug Strategy, launched in 2007, continues to pursue a goal of reducing illicit drug use while heavily focusing on law enforcement and criminalization (Government of Canada, 2012), rather than the harm reduction strategy that, “seeks to reduce or minimize the adverse health and social consequences of drug use without requiring an individual to discontinue drug use” (CCSA, 2008, p. 2).

The National Anti-Drug Strategy is led by the Department of Justice of Canada, and consists of three action plans including: preventing use, treating dependency, and controlling the distribution and production of illicit substances (Government of Canada, 2012). The prevention and treatment action plans are to provide information about drug abuse among young people, as

well as to provide treatment and rehabilitative services to people who live with addiction (Government of Canada, 2012). This reflects similarities to the four-pillar approach of the Canadian Drug Strategy, which was launched in 1987, in pursuit of reducing illicit drug use through education, prevention, harm reduction, and enforcement (CCSA, 2005; Zilkowsky, 2001). The enforcement action plan, of the National Anti-Drug Strategy, is highly focused on and likely responsible for the increase in law enforcement capacity to target organized crime in the production and distribution of illicit substance, as well as enhance the capacity of the criminal justice system to investigate, interdict, and prosecute offenders (Government of Canada, 2012).

Instead of continuing to follow a four-pillar approach from the 1987 Canadian Drug Strategy (CCSA, 2005), the current government emphasized criminalization and law enforcement, with little focus on harm reduction based strategies to address the public health concerns of substance abuse and misuse. DeBeck, Wood, Montaner, and Kerr (2009), through an informal audit of reported funding allocation on Canada's new National Anti-Drug Strategy, reported that 70% of drug strategy funding is allocated to law enforcement initiatives, only leaving 4% for prevention, 17% for treatment, and 2% for harm reduction. DeBeck et al's. (2009) informal audit suggested that the Canadian government is failing at investing in evidence-based drug policies. This highlights the challenges that people seeking MMT face, and is an example of how people seeking MMT are failed by a government in its duty to provide their basic health needs, and to ensure that there is a possibility of health for all.

Harm Reduction and Opioid Substitution Treatment. Opioid substitution treatments are considered a harm reduction approach, a specific example of which is the use of methadone maintenance. Methadone maintenance is a treatment approach for opioid dependency to help reduce opioid use, injection drug use, transmission of infectious diseases, and criminal activity (Bernise et al., 2008), and has been recognized and supported by research for its effectiveness as

a treatment for opioid dependency. Methadone maintenance treatment programs struggled to take ground, as a result of the resistance from the idea that methadone therapy is not an abstinence-based treatment (Courtwright, 1997), and that it provides opioid users with legal substances to replace their reliance on illegal drugs. Stimson and O'Hare (2010) argue that more needs to be done to fund low-threshold early access to methadone, and if people continue to have no access to appropriate treatment, and continue to use drugs, this may amount to a, "quit or die philosophy" (p. 92). Moreover, harm reduction should be moved from the exceptional to the mainstream of treatment (Stimson & O'Hare, 2010).

Indeed, Beirness, Jesseman, Notarandrea, and Perron (2008) argue that substitution treatment for drug users can be described as secondary prevention with the goal of preventing the progression of the disease and reducing the adverse consequences of high-risk behaviour. Michels and Stover (2012) express that drug use related dependence on psychoactive substances has relatively recently in human treatment been medicalized as a substance use disorder requiring treatment. However, Michels and Stover (2012) expressed that MMT was seen as a failure because abstinence-orientated services were regarded as the 'gold' standard of treatment. With that being said, there continues to be misconceptions of methadone and reactions from the public, as in a 'not in my backyard' philosophy, which can cause ambivalence of the public to not accept treatment clinics in their surrounding areas (Isaac et al., 2004; Vigilant, 2004). These stereotypes and misconceptions inhibit treatment seeking and contribute to early treatment termination (Vigilant, 2004).

Unfortunately, government officials and policy makers in Canada have continued to ignore the evidence of beneficial harm reduction interventions. Resistance still remains in relation to prison harm reduction programs, and supervised injection sites that are designed to reduce drug use and blood borne disease transmissions, despite the highly elevated risk (Khoshnood,

2007). Khoshnood (2007) argued that it is a violation of medical rights when people are not allowed access to opioid substitution treatment. Opioid substitutions are successful in reducing drug use, violent and non-violent harm, and the transmission of blood borne diseases, and it is the standard medical treatment for opiate dependence in most countries (Maeyer, Vanderplasschen, Laura, & Vanheule, 2011). Even with that being the case, strict government regulations and controversy with harm reduction programs have resulted in the prevention of access to treatment (Logan & Maralatt, 2010).

History of Methadone and the Liberalization of Methadone Treatment in Canada

History. During the Second World War when morphine was difficult to obtain, methadone was used as an important alternative to morphine (Lugo, Satterfield, & Kern, 2005). This occurred because, in Germany, during the Second World War, scientists, who were originally looking for a pain reliever to help alleviate the opium shortage at the time, created methadone (Jamieson, 2002). Immediately after World War II, methadone became much less used.

However, by the 1950s to 1960s, there was an emergence of opioid addiction and intravenous heroin use in New York City (Joseph et al., 2000). As a response, and due to the failure of other treatment strategies (Payte, 1997), researchers were motivated to search for a solution for heroin addiction with the results of reducing or eliminating withdrawal signs and symptoms, drug cravings, and normalizing a person's physiological state (Dole & Nyswander, 1965; Dole, Nyswander, & Kreek, 1966). Methadone again emerged as a synthetic alternative, and was first recognized as an effective treatment option to help people withdraw from heroin in 1949 (Isbell & Vogel, 1949; Joseph et al., 2000). The procedure was over a seven to ten or more day period where people were weaned off methadone doses; this protocol was followed in many institutions in the United States (Joseph et al., 2000).

However, in the 1950s and 1960s, follow-up studies showed a failure rate of 90% after people discontinued or were discharged from treatment (Duvall, Locke, & Brill, 1963; Hunt & Ordoroff, 1962 as cited in Joseph et al., 2000). Due to the increasing use of heroin and of treatment failure, a grant was awarded to Vincent and colleagues from the New York City Health and Research Council in 1963 to find a treatment for opioid addiction (Payte, 1997). With Dole's assumption of a metabolic basis for opioid addiction, he searched for a pharmacological intervention and again returned to methadone as a viable treatment option (Payte, 1997). This time, however, the research led to the development of methadone maintenance, rather than exclusive weaning (Courtwright, 1997; Kreek & Vocci, 2002; Joseph et al., 2000; Payte, 1997).

This was a revolutionary treatment for opioid addiction, and the studies began as routine observational research on the effects of different narcotics on people who lived with addiction (Courtwright, 1997). Over time, Dole and Nyswander observed that different narcotics had different effects on addiction, and, in 1964, it was noted that methadone could change individual behaviour dramatically (Berle, & Nyswander, 1964; Courtwright, 1997). With continuous observation, these studies showed the removal of drug cravings and the prevention of withdrawal symptoms for greater than 24 hours with an absence of sedation and psychomotor impairment (Payte, 1997). In addition, people on MMT experienced a blockade effect, which is an important clinical effect of methadone (Courtwright, 1997; Payte, 1997). That is, patients who were stabilized on methadone did not experience euphoria or effects from other opioids (Courtwright, 1997). Furthermore, patients reported having no withdrawal symptoms and their previous habits, including recreational drug use and illegal activities in order to afford heroin, did not need to be supported because of methadone. In addition, it was observed that methadone could help people stabilize their lives (Courtwright, 1997). Clinical studies initially included only male participants, and 65 female participants were recruited by 1967.

Methadone gained ground in the United States in the 1960s (Courtwright, 1997). In New York City, Nyswander and Dole (Courtwright, 1997) started a methadone treatment centre, and, by the end of a decade, had 1000 patients enrolled. However, the real increase in uptake of methadone maintenance occurred in the 1970s; by 1973, more than 80,000 Americans were enrolled in methadone clinics (Courtwright, 1977; Payte, 1997). In response to the expansion of methadone treatment, the federal government began to react against methadone clinics as a result of a public ‘not in my back yard’ syndrome (Courtwright, 1977). As a result, after the mid-1970s, it became difficult to establish new methadone facilities. In addition, the government started regulating methadone, and developed standards for the “treatment of narcotic addiction with methadone” (Payte, 1997, p.150). This regulation of methadone limited the number of clinics available, making it difficult for people to obtain treatment, and it started to change the idea of maintenance and rehabilitation and moved the focus towards abstinence being the optimal aim of treatment (Payte, 1997).

Methadone in Canada. Methadone treatment approaches in Canada were similar to those in the United States (Fischer, 2000). Methadone treatment began in Vancouver in 1959 with a small controlled experiment by Dr. Robert Halliday, an addictions treatment specialist, “who set up what is believed to be the first MMT program in the world” (CPSO, 2011, p. 20). Dr. Halliday began by investigating the short-term withdrawal effects of opiate addiction with the use of methadone; he eventually shifted towards a prolonged withdrawal program initiative (CPSO, 2011). This approach was institutionalized in 1963, and it involved a combination of methadone and psychosocial treatment, with abstinence not being the primary goal of treatment (CPSO, 2011). In 1964, the same time of Dole and Nyswander’s treatment experiences in New York, the first methadone treatment program began at the Addiction Research Foundation in Ontario, and, in the second half of the 1960s, methadone became the accepted treatment option

for opiate addiction across Canada (Fischer, 2000). Consistent with the United States, as a response to the concern of heroin addiction, methadone programs expanded rapidly (Rosenbaum, 1997 as cited in Fischer, 2000). In the early 1970s methadone treatment was approved in Canada by the “Commission of Inquiry into the Non-Medical Use of Drugs” (Fischer, 2000, p. 191).

Similar to the shift in the United States, in Canada, methadone also became strictly regulated with the stated goal of any treatment intervention being declared to be abstinence (Fischer, 2000). The federal Department of Health, in response to the developing problems around methadone treatment, developed a “Special Joint Committee” which included health professionals, law enforcement officials, and representatives of the Canadian Medical Association (Fischer, 2000). This committee advocated for the establishment of methadone treatment guidelines and the federal government accepted the committee’s regulations, which came into law as the Narcotic Control Act in 1972 (Fischer, 2000). As a result, the new regulations caused drastic affects including the restriction of methadone availability, the discouragement of continuing methadone prescribers, and methadone treatment dropout (Fischer, 2000). It was not until 1992 when Canadian federal health authorities revised the methadone treatment guidelines without moving away from the restrictive regulation put in place twenty years earlier. Furthermore, despite restrictive guidelines, the number of methadone patients continued to increase and, in 1995, there were more than 3,000 methadone patients in Canada (Fischer, 2000).

Thereafter, the federal health authorities transferred administrative authority over methadone treatment to provincial bodies, effective in 1996 (Fischer, 2000). In Ontario and British Columbia, the responsibilities for methadone oversight was given to the College of Physicians and Surgeons, where the authorization and guidelines for methadone treatment was revised into a less restrictive framework, allowing physicians to have more freedom to decide on

treatment guidelines (Fischer, 2000). In addition, the authorization process for physicians to practice with methadone treatment was liberalized (Fischer, 2000). Methadone authorization procedures changed from a 15-day internship to be renewed annually, to a two-day practical training course and one-day workshop, which helped increase treatment availability and practice. As a result, this increased patient enrolment from 770 to 4,500 and prescribing physicians from 47 to 200 from 1996 to 1999 (Fischer, 2000). The liberalization of methadone treatment increased the availability of treatment and practicing practitioners in Canada.

Methadone Maintenance Treatment

For the purpose of this review, only information on oral administration of methadone will be provided. Such material helps situate the practical realities of MMT, and are important when discussing the participants' experiences and perceptions of MMT. Please refer to Appendix A for a review of MMT and the Pharmacokinetics of methadone.

Take-Home Doses or “Carries.” Observed daily dosing can have a great impact on an individual's daily life routine and can be seen as restrictions towards their life (Pani, Pirastu, Ricci, & Gessa, 1996). Take-home doses are highly valued by people enrolled in MMT (Amass, Bickel, Crean, Higgins, & Badger, 1996; Pani et al., 1996), whereas restrictive take-home doses can significantly undermine retention in treatment (CPSO, 2011; Pani et al., 1996). Take-home doses are doses that are intended to be taken at home by people who have been enrolled in MMT for two months and meet the criteria for clinical stability and no problematic substance use (CPSO, 2011). Appropriateness of take-home doses is based on three factors including, 1) community safety, 2) clinical stability, and 3) the individual patient. Clinical stability is defined by the CPSO (2011) as meeting the following:

The patient is on a stable dose of methadone, has no recent problematic drug or alcohol use, is compliant with treatment directives (as seen above), has stable housing, and is emotionally stable and understands the safety concerns with having methadone doses at

home. In addition, patients need to meet the criteria of non-problematic drug use. Non-problematic drug use is defined as intermittent sporadic drug use without significant adverse consequences, this also includes individuals having a stable mood, sustain stable relationships and maintain productive activities including work, family, and school (CPSO, 2011, p. 53).

When the person meets the criteria described above and s/he has had at least one week of no problematic substance abuse, confirmed by history and urine drug screening, take-home doses can be prescribed two-months post treatment initiation. Thereafter, take-home doses are increased every four weeks with continuous evidence of clinical stability. At this time, dose adjustments may be made as long as the patient remains clinically stable during this time (CPSO, 2011). In addition, accelerated take-home doses can be given to patients who have regular work, full-time educational programs or family commitments that restrict the person from receiving their daily observed doses are eligible to receive this accelerated schedule (CPSO, 2011). The CPSO (2011) identifies that participants may fall under this category if they are at a lower risk for misuse of their take-home doses, meaning, the person is clinically stable, does not have concurrent substance abuse, and has no concurrent active mental illness. However, the CPSO (2011) identified that a minority of participants will “likely” require accelerated doses. In this case, take-home doses may be prescribed after one month of MMT initiation with subsequent doses given every two to four weeks (CPSO, 2011).

Other special considerations for take-home doses include Sunday dosing and “special carries” for exceptional circumstances (CPSO, 2011). In situations where pharmacies are closed on Sundays, people may be forced to go to another pharmacy that causes them inconveniences and increases the risk of early treatment termination. In such circumstances, a take-home dose may be prescribed after four weeks of MMT initiation for those who do not have accessibility to a pharmacy on Sundays (CPSO, 2011). In addition, the CPSO (2011) identifies that “special carries” may be prescribed in exceptional circumstances, for example, personal or family crises

(with verifying information). At the end of the “special carries” period is over, their previous methadone administration should be resumed (CPSO, 2011).

The CPSO (2011) outlines that a relapse in MMT does not mean that take-home doses should be reduced or removed from the person involved. The guidelines of MMT administration outline that a single episode of drug use does not mean or require a reduction in take-home doses, unless the person shows other signs of clinical instability; however, if the person continues to relapse then take-home doses should be reduced during this time (CPSO, 2011). If a person has had a sustained relapse and take-home doses are reduced they should be placed on a contingency management program. A contingency management approach is set in place to help patients recover from their relapse before causing physical or social damage (CPSO, 2011). This approach involves an increase in urine drug screening, counselling, and follow-up appointments with their prescribing physician. Take-home doses are then reinstated slowly, with one take-home dose per week, as the relapse resolves (CPSO, 2011).

In some cases, take-home doses need to be reduced or discontinued in circumstances that do not involve substance use including early consumption of take-home doses, repeat reports of lost or stolen take-home doses, tampering with urine drug screening, diversion of take-home doses, no longer having stable housing, safety issues concerning mental illnesses that may put them at risk of misuse, and incarceration (CPSO, 2011). According to the CPSO (2011), receiving observed daily dosing provides people with structure and stability, which may be of benefit to those who have mental health issues or recovery needs. For safety reasons (related to drug interactions and potential toxicity or overdose), in circumstances where the people have tampered with their urine drug screening to conceal relapse, take-home doses should be cancelled immediately and reinstated at the discretion of the physician, if the person is reliable and demonstrating abstinence (CPSO, 2011).

Diversion is a serious concern to the safety of the public and the use of methadone for analgesia purposes has increased immensely with a seven-fold rise from 1997 to 2004 in the United States (CPSO, 2011; Joseph et al., 2000). The risk of diversion increases in people who have, “suicidal ideation or cognitive impairment, are homeless, living in a shelter or transiently housed, and are actively addicted to alcohol, cocaine, benzodiazepines or other drugs” (CPSO, 2011, p. 53). For situations where diversion is involved, take-home doses should be cancelled immediately and restricted indefinitely. Lastly, due to the fact that people are clinically unstable upon release from jail where prolonged periods of incarceration are involved (3 or more months), if take-home doses were provided prior to incarceration, their take-home doses should be held for a week after their release from jail and reinstated at a rate of one take-home dose per week (CPSO, 2011).

Patient Perspectives on the Potential Negative Effects of Methadone Treatment.

People who are enrolled in a methadone program may experience disadvantages, other than adverse side effects, such as discrimination, feelings of degradation, inconvenience from the program policies, such as, frequent physician appointments and observed methadone administration, and negative influences from other persons enrolled in the program, (Isaac et al., 2004). Many people on MMT are discriminated against and stigmatized as still being an “addict” because they are not enrolled in abstinence-based treatment (Isaac et al., 2004; Joseph et al., 2000). Vigilant (2004) performed a qualitative study to understand the stigma associated with MMT, and 98% of the participants ($n = 24$) reported that stigma was an essential feature. Vigilant (2004) identified that such stigma occurred on three levels: macro (the enacted stigma experienced from family and friends and recovery groups) meso (the institutional shame and loss of control stigma) and micro (stigma from within the individual) (Vigilant, 2004).

Participants in Vigilant's (2004) study expressed that they experienced enacted stigma through public shame. Participants expressed not wanting to disclose that they were on methadone, but as a result of program policies, including observed methadone dosing and public methadone clinics, non-disclosure was not always an option (Vigilant, 2004). In addition, Vigilant's (2009) study participants expressed that they also experienced enacted stigma during methadone recovery, NA and AA fellowships, as they did not receive "credit" for clean time due to the fact that they were on methadone. As a result, participants expressed that they did not feel safe attending support services due to the fear that they will be faced with being "judged" that they are "not clean" (Vigilant, 2004). This public shame can lead to social exclusion. Vigilant (2004) explained that, in keeping MMT a secret and avoiding NA/AA fellowships, the study participants did not meet new social groups and avoided their previous lifestyle of injection drug use. Furthermore, this idea that methadone is "non-abstinent" not only caused premature discharge from MMT, but also caused participants to lead "double lives because of their fear of disclosure" (Vigilant, 2004, p. 407).

Similarly, Anstice, Strike, and Brands (2009) conducted a qualitative study in Ontario, Canada exploring the patient perspectives on supervised methadone consumption. One conclusion of their study was stigma in relation to the methadone dispensing space (Anstice, et al., 2009). To illustrate, the participants ($n = 64$) described the place of methadone consumption as lacking of privacy and confidentiality, which led the participants to feel "labelled" when "other" people saw them receive their methadone dose. Participants also explained that MMT dispensing pharmacies were less stigmatizing than other pharmacies because in such specialized pharmacies the participants did not feel they were distinguished from other costumers. Specifically, one participant preferred a MMT only pharmacy; he stated, "[the] MMT program is there for people like us" (Anstice et al., 2009, p. 800). It has been reported though that people

on methadone feel that being separated from other customers, in pharmacies, is stigmatizing (Vigilant, 2009). One participant expressed that she felt ostracized and viewed by others as shameful and untrustworthy (Anstice et al., 2009). This can occur when pharmacies have a separate area for methadone administration.

In addition, in concentrated MMT clinics, people can also come into contact with other persons who continue to use alcohol, illicit opioids, or other substances (Isaac et al., 2004). This is of concern in dispensing pharmacies where people can meet other persons on MMT because it can be a trigger to start using illicit substances and cause relapse (Vigilant, 2009). Similarly, the participants in Anstice et al.'s (2009) study also identified the space of methadone as being a trigger for relapse. Relapse is defined by a recurrence in a behaviour that changes an individual's progress, e.g., abstinence from illicit drug use (Hendershot, Witkiewitz, George, & Marlatt, 2011). A trigger, also known as a negative effect (Hendershot et al., 2011), is something that can cause people who are in recovery to return to their addiction. It is important for people, who are in recovery, to identify their potential relapse triggers and to learn coping strategies to overcome their identified triggers, rather than returning to the use of illicit drugs.

Furthermore, the rules and policies of MMT can bring on feelings of degradation. Participants have identified that program practices can be demeaning and degrading with urine drug screening and policies of observed methadone administration (Anstice et al., 2009; Reisinger et al., 2009; Vigilant, 2004). Vigilant (2004) described this as meso-stigma, where participant's expressed that urinalysis was demeaning and "the most humiliating and stigmatizing of all institutional practices" (p. 412). Participants described feeling a loss of control with providing urine samples, as a result ending their treatment prematurely (Vigilant, 2004). In addition, participants also described felt stigma, or micro-stigma, with the realization that their past life of "using drugs" was associated with shameful behaviour (Vigilant, 2004).

The inconvenience of the program can also hinder treatment participation and retention (Isaac et al., 2004). Inconveniences that the program can include involve frequent physician visits, daily-observed medication administration, limited pharmacy dispensaries, and weekly or bi-weekly urine samples (Anstice et al., 2009; CPSO, 2011). To support the foregoing point, Reisinger et al.'s (2009) study, exploring patient perspectives ($n = 45$) on being discharged within the first 12 months of methadone treatment, concluded that 40.5% of the participants left treatment as a result of program related factors. Participants in Reisinger et al.'s (2009) study expressed that the program rules hindered their ability to progress in life changes causing frustration, with an end result of leaving treatment prematurely. Similarly, in Anstice et al.'s (2009) study participants expressed that restricted pharmacy hours placed limitations on their daily lives; some participants described this as "intrusive" (p. 798). As a result, some participants expressed having issues with a loss of control and not wanting to be dependent on methadone. Participants expressed that methadone, "exerted a control over their life that reminded them of their addiction to heroin" (Reisinger et al., 2009, p. 290). Furthermore, in Vigilant's (2004) study participants expressed that they felt their life was restricted and controlled by rules and policies of the methadone program. Vigilant's (2004) study highlighted that methadone offers this idea of recovery as well as "sobriety detectives serving as a form of punishment-treatment-punishment" (p. 416), due to the strict program policies. As a result, causing participants to prematurely drop out of treatment (Reisinger et al., 2009).

Lastly, individuals enrolled in methadone have expressed dropping out of MMT as a result of finances. There is a price for methadone prescriptions if the person does not have medical coverage; the average cost of methadone can vary between \$4 and \$15 depending on the clinic or pharmacy (Isaac et al., 2004). Some participants in Reisinger et al.'s (2009) study, situated in Baltimore in the United States, described financial concerns as a reason for

discontinuing methadone treatment. In Ontario, methadone is covered by the Ontario Health Insurance Program and Ontario Drug Benefit Program (Ontario Addiction Treatment Centres, 2013). In contrast to those who were dissatisfied with MMT, positive perspectives of methadone included not having to resort to criminal activity, removing financial drain of a drug addiction, being able to have a healthy structured lifestyle, and being able to move on with their lives (Reisinger et al., 2009; Singh, Shrestha, & Bhandari, 2013).

Appropriate Administration and Retention in Treatment. Providing MMT appropriately is essential for safety and for the retention of opioid dependent people in the program (WHO, 2004; CPSO, 2011). The objectives during the initial dosing of methadone are to retain people in treatment by reducing withdrawal symptoms, maintain patients' safety, and maintaining a balance between relief of withdrawal and toxicity (WHO, 2004; CPSO, 2011). People have an increased chance of death from methadone overdose during the first two weeks of MMT (Brands et al., 2002; CPSO, 2011). Caplehorn and Drummer (1999) stated that:

[t]he risk of fatal methadone overdose during this time period is estimated to be 6.7 times higher than that of heroin addicts not in treatment...and 98 times higher than that of patients on maintenance doses of methadone in treatment for longer periods. (Caplehorn and Drummer, 1999, p. 107)

This elevated mortality risk relates to the prolonged half-life of methadone, and the fact that the accumulation of doses can be toxic by day three to five after initiation. This is an important factor in the initiation of methadone because the person may appear alert and stable during the day, yet, may overdose while sleeping due to accumulation of doses (CPSO, 2011). Therefore, appropriate maintenance and careful monitoring of methadone is essential at the outset of therapy.

Furthermore, retention is a key indicator of methadone treatment success with the initial methadone dosage being an important factor in achieving positive health outcomes (Brady et al.,

2005; Brands et al., 2002; D'Ippoliti et al., 1998; Gossop et al., 1999; Joseph et al., 2000; Mullen et al., 2012; Villafranca et al., 2006). The highest retention rates in MMT are among people who receive a higher dosage of methadone, with the average dose being 60 milligrams per day (D'Ippoliti et al., 1998; Brady et al., 2005; Joseph et al., 2000; Mullen et al., 2012). However, Maremmani, Pacini, Lubrano, and Lovrecic (2003) found that there is no optimal dosage that is adequate for the vast majority of people; dose is dependent on individual needs. This response to methadone is measured in retention in treatment, reduction in illicit opioid use, and a person's psychosocial and medical status (Bart, 2012). In addition, once a stabilization dose of methadone is achieved, it is also effective in supporting improvement in health, mental health, and social function. Stabilization on methadone is an important factor for people when faced with decision-making and when in other treatment settings because it normalizes many of the physiological functions of pain, reward, and mood (Bart, 2012; Fletcher & Battjes, 1999).

Retention in and Efficacy of Opiate Treatment Modalities

The appropriate methadone dose is a key factor for retention in MMT and the highest retention rates are among people who receive a higher dosage of methadone maintenance (Brady et al., 2005; Brands et al., 2002; D'Ippoliti et al., 1998; Faggiano, Vigna-Taglianti, Versino, & Lemma, 2008; Joseph et al., 2000; Mullen et al., 2012; Perreault et al., 2015). Higher doses of methadone are more effective in retaining people in treatment and for decreasing illicit opioid use (Jamieson, 2002). Furthermore, the appropriate methadone dose is not only essential for retention, but also effective in supporting improvement in a person's physiological health, psychological health, and social function (Fletcher & Battjes, 1999). Stabilization on methadone is an important factor because it normalizes many of the physiological functions of pain, reward, and mood (Bart, 2012). In addition, some of the psychosocial problems that are associated with opioid addiction are also relived during the maintenance phase of methadone (Bart, 2012). This

relief is a result from the abnormal increases in hormonal responses to stressors, which occur during the addiction, that are corrected once the methadone dose is stabilized (Kreek, Borg, Zhou, & Schluger, 2002). The normalization of hormonal responses allows people to function without feelings of withdrawal and euphoria, and to deal with life stressors (CPSO, 2011).

In addition to appropriate and high level initiative MMT doses, the availability and utilization of multidimensional support services affects retention in MMT (Jamieson, 2002). Dole and Nyswander (1965), in their initial evaluations of MMT, identified that both methadone and supporting programs were essential to the success of their clinical trial. Research continues to highlight the effects of treatment outcomes when MMT is combined with counselling and multidimensional treatment services (Callaly, Trauer, Munro, & Whelan, 2001; Deck & Carleson, 2005; Gossop, Stewart, Browne, & Marsden, 2003; Wilson, MacIntosh, & Getty, 2007). These include: outpatient day programs, follow-up care, counselling, support groups, and social services. Research highlights that combining counselling with MMT improves treatment outcomes and should be considered an essential component of methadone treatment programs (Callaly et al., 2001; Deck & Carleson, 2005; Gossop et al., 2003; Wilson et al., 2007). To explain, counselling and management enhances treatment retention, decreasing illicit drug use, and improving an individual's overall functioning in criminal behaviour, homelessness, mental health, and vocational and educational involvement (Jamieson, 2002). Although the availability of services for people enrolled in MMT varies, few people use treatment services within MMT programs (Wideman, Platt, Lidz, Mathis, & Metzger, 1997).

Having an awareness of how personal characteristics, service usage, and treatment outcomes interact is important for the design of MMT. The available research suggests that multiple factors influence people's utilization of such services, including counselling. Personal characteristics, such as, age, employment, racial differences, and age of first heroin use and age

of MMT initiation have an affect on whether people utilize services (Wideman et al., 1997; Villafranca et al., 2006). For example, Wideman, Platt, Lidz, Mathis, & Metzger (1997) identified that participant characteristics were statistically significantly associated with service utilization. When participants used counselling services of any type, such as, attended a mental health center, psychologist or psychiatrist, religious and/or college councillor, participants who were “predominantly white, had more education (in terms of having a high school diploma), and to report more frequently that they had worked in the past year than participants who had not used these services” (Wideman et al., 1997, p. 32). Wideman et al. (1997) also found a relationship between subjects who were younger when entering drug treatment and “report[ed] cocaine use during the proceeding month” (p. 32).

Services provided to people enrolled in methadone need to be specific to the persons’ needs for the programs to be successful and for the utilization of services available (Jackson, 2002; Kelly, O’Grady, Mitchell, Brown, & Schwartz, 2011; McHugh et al., 2012). Accordingly, the needs of the people should be assessed and systematically matched to needed services. Although mental health services combined with MMT yield an increase in treatment retention, Deck and Carlson (2005) found that mental health services were not significantly associated with retention. These authors (2005) noted that the individualized need for mental health services is a more consistent predictor of retention. With that being said, service delivery personnel need to examine what services are necessary for the population being treated, and that services need to be offered to whom they are needed by (Deck & Carlson, 2005; Wideman et al., 1997). In addition, having the services available and accessible, geographically and financially, can improve outcomes and service utilization. Deck and Carlson (2005) found that in most cases, there was no alternative support for treatment services, subsequently resulting in an increase in drug use, crime, and HIV risk behaviour.

The relationship between patients and their MMT providers is also an important factor for retention in treatment (Kasarabada, Hser, Boles, & Huand, 2002). Patients in MMT are in close contact with their pharmacist on a daily basis and prescribing clinician weekly to bi-weekly. Kasarabada et al. (2002) performed a study assessing patient perceptions ($n=55$) of their counsellors in different treatment settings including outpatient drug free/day treatment, residential treatment, inpatient/detoxification, and methadone maintenance treatment. These authors (2002) concluded that assessing patient perceptions of their counsellors is an important factor in treatment planning. When patients showed positive perceptions of their treatment counsellors, results showed an increase in treatment retention, a decrease in alcohol and drug use, and improved psychological functioning (Kasarabada et al., 2002). With that being said, patients in methadone treatment have reported strong feelings about their interactions with pharmacist and dispensing staff (Anstice et al., 2009). Although some participants reported feeling respected and having friendly interactions with their pharmacists/dispensing staff, others reported feelings of discrimination, patronization, and having feelings of a “business like” transaction (Anstice et al., 2009, p. 800). Reisinger et al. (2009) identified that conflicts with program staff in MMT was a main reason for patients to prematurely discontinue treatment.

One important relationship to consider is the relationship between the prescribing clinician and the patient. Prescribing clinicians have a key role in the management of methadone. It is important for patients to have positive perceptions of their prescribing clinician in order to seek treatment. Hindler et al. (1995) performed a study to determine drug users’ views about general practitioners and history of drug use. These authors (1995) noted that patients preferred to seek treatment (detoxification programmes, maintenance prescriptions, general medical care, or counselling) from general practitioners because these providers were perceived to be more

accessible, and that they created a more holistic approach for their programs, compared to hospital based services (Hindler et al., 1995).

However, patients also had negative perceptions of general practitioners. Patients felt an “attitude” from practitioners and that they lacked sympathy, knowledge, and did not see dependency as a medical disorder (Hindler et al., 1995). A study conducted by Groves and Strang (2001) exploring general practitioners (n = 52) views on working with opiate misusers support Hindler et al.’s (1995) findings. Groves and Strang (2001) identified that general practitioners have opposing views on the administration of methadone treatment. Practitioners who did not prescribe methadone saw methadone treatment as “supplementing the patient’s addiction” (Groves & Strang, 2001, p. 134). Several practitioners had mixed feelings about prescribing methadone, it was acknowledged that they felt it was a waste of time, demoralizing when patients cannot wean off of it, and that they do not see it as a therapy leading to abstinence (Groves & Strang, 2001). Other practitioners, meanwhile, described methadone administration as rewarding and that methadone had a beneficial impact on their patient’s lifestyle; they saw methadone patients as real people (Groves & Strang, 2001). Overall, if patients feel devalued and stigmatized by prescribers, this can affect their treatment, as it can create barriers to access, retention, and success (Anstice et al., 2009; Karsarabada et al., 2002; Vigilant, 2004).

Personal satisfaction is another common factor that has a great effect on retention in MMT (Deck & Carlson, 2005; Wideman et al., 1997). As noted above, the appropriate dosage is essential for treatment satisfaction because treatment satisfaction is more common when dosing is appropriate (Villfranca et al., 2006). In addition, personal characteristics and needs of people enrolled in methadone are unique and differentiate within and among clinics; therefore, services need to be provided that address the people’s individualized needs, which in turn will improve MMT programs and service utilization (Wideman et al., 1997). With this in mind, when MMT

service delivery is based on individual treatment planning, in which peoples' needs are assessed and identified appropriately, personal satisfaction improved, which in turn, improved retention in treatment (Deering, Horn, & Frampton, 2012; Jackson, 2002; Kelly et al., 2011; McHugh, 2012; Wideman et al., 1997; Villfranca et al., 2006).

System characteristics of methadone, such as, clear program philosophies, also influence individual retention in treatment (D'Ippoliti et al., 1998; Maura et al. 1998). D'Ippoliti et al. (1998) investigated retention and the effect of methadone dosage and treatment policy in an observational study in Italy, and observed that treatment dropout within a year was 30% less for people who entered maintenance-oriented clinics, compared to abstinence-oriented clinics. According to Deck and Carlson (2005) abstinence-oriented clinics are methadone clinics that do not allow people to concurrently use illicit substances while on methadone, and drug use can cause administrative discharge or involuntary withdrawal in some programs. Administrative and treatment practices vary across clinics, which has an effect on treatment dropout. D'Ippoliti and colleagues (1998) discovered that with one-year retention of cases being less than half, their results suggested that the effectiveness of treatments offered would have been significantly improved by a change in treatment strategies (D'Ippoliti et al., 1998).

Lastly, assessing the patient's satisfaction throughout treatment is important to identify a patient's status within the program. Joe, Broome, Rowan-Szal, and Simpson (2002) identified the value of monitoring patients functioning within treatment programs to identify different variables that can offer a valuable insight into improving treatment programs. For example, utilizing a assessment tool, such as, a Client Evaluation of Self and Treatment self-rating instrument has shown positive outcomes in reducing drop-out rates, relapse rates, and high-risk behaviours among injection drug users (Joe, Broome, Rowan-Szal, and Simpson, 2002).

Incorporating an assessment tool within the MMT program could be helpful in identifying patient satisfaction and individual program requirements to help increase retention in treatment.

Related Outcomes for Methadone Maintenance Treatment

The following outcomes are not exclusive to MMT and similar outcomes have been reported for alternative treatment strategies including, safe injection sites and other pharmacological agents, such as Suboxone. Treatment efforts can improve health outcomes. However, for the purpose of this literature review, only MMT related outcomes are described.

Decreased Mortality and Morbidity. When untreated opioid dependence is associated with significant morbidity and mortality. In Canada, in 2002, a total of 1695 individuals died as a result of illegal drug use, accounting for 0.8% of all deaths (Rehm et al., 2006). The National Consensus Development Panel on Effective Medical Treatment of Opiate Addiction (1998) reported that people receiving MMT have much lower death rates than people who are dependent on opioids and not receiving treatment; “the death rate for those not receiving treatment is more than three times higher than for those engaged in treatment” (as cited in, Jamieson, 2002, p. 9). Clausen, Anchersen, and Waal (2008) performed a prospective cross-registry study involving participants, including all dropouts, who received up to seven years follow-up in Norway, and examined mortality reductions in an “intention-to-treat” perspective. These authors concluded that an important factor of reduced mortality is by providing rapid access to MMT for suitable cases and treatment retention (Clausen, Anchersen, & Waal, 2008). However, a cohort study of 3,162 Scottish drug users, by Cousins et al. (2011), identified periods of elevated risk of drug-related mortality during MMT in primary care. Their study found that drug-related mortality in MMT is increased during periods of treatment transition, treatment initiation, and the first 30 days after treatment dropout or discharge (Cousins et al., 2011). In summary, their study concluded that an increase in monitoring of people is required during the

high-risk periods outlined (Cousins et al., 2011). It appears that the greatest likelihood of mortality associated with MMT occur during the induction period because of multiple drug ingestion (e.g., benzodiazepines, alcohol, or other opioids), or due to the loss of tolerance of opioids, with subsequent overdose on methadone, when methadone is discontinued (Bart, 2012).

Notwithstanding concerns during the induction phase of MMT, mortality rates during MMT are lower in comparison to people dependent on heroin out of treatment (Mattick & Degenhardt, 2003; Stenbacka, Leifman, & Romelsjo, 1998). Hickman and colleagues, in their multivariate analysis of 3, 961 death certificates, found that from: “1993-1998 there was a 24.7% yearly increase in heroin deaths compared to 9.4% for methadone only; a significant difference ($p < 0.001$)” (Hickman et al., 2003, p. 422). Lastly, people who intravenously inject heroin who enter and stay in MMT can reduce their risk of mortality due to their decreased intravenous illicit drug use, HIV risk behaviour, and criminal activity (Mattick & Degenhardt, 2003; Stenbacka et al., 1998; Hickman et al., 2003).

Criminal Behaviour, Convictions, and MMT. Substance use is a severe risk factor for criminality (Soyka et al., 2012). Long-term studies have suggested that opioid users have a high risk of being incarcerated and re-incarcerated (Larney, Toson, Burns, & Dolan, 2011; Soyka et al., 2012). To illustrate, in Vancouver, it is estimated that 70% of all criminal activity is associated with illicit drug use; criminal activity can include breaking and entering, robbery, theft, prostitution, and murder (Office of the Auditor General of Canada, 2001). Furthermore, although there is little information about drug-related behaviours in correctional facilities in Canada, “the proportion of inmates reporting a history of drug injection ranges from 28 to 50%” (Calzavara et al., 2003, p.1258). Providing treatment for addiction in correctional facilities is important because substantial proportions of prisoners have opioid related problems (Bukten et al., 2011; Macswain, Farrell-MacDonald, Cheverie, & Fischer, 2014; Soyka et al., 2012). As a

result, new evidence suggests that providing methadone to people dependent on heroin prior to release from prison reduces recidivism and adverse health and social consequences associated with drug use (Bukten et al., 2011; Gordon, Kinlock, Schwartz, & O'Grady, 2008; Havnesa et al., 2012; Macswain et al., 2014). To illustrate, Gordon, Kinlock, Schwartz, & O'Grady (2008) performed a randomized controlled trial examining the effectiveness of MMT initiated prior to, or just after, a person's release from prison. The participants ($n = 211$) were randomized into three different treatment options, and the study found that treatment conditions were a significant predictor for reducing drug use and criminal activity (Gordon et al., 2008). The counselling and methadone group reported few days of heroin use (49.2 versus 85.8 days, $p > 0.01$), compared to counselling only participants (Gordon et al., 2008). The treatment condition was also a significant predictor with a decrease in criminal activity (Gordon et al., 2008). The groups that received MMT and counselling and counselling and transfer (participants received counseling in prison without methadone and upon release were transferred to a methadone maintenance clinic in the community) reported fewer days of criminal activity, compared to participants in the counselling only group (Gordon et al., 2008). Similarly, Bukten et al. (2011) observed significant reductions in criminal convictions during MMT; the rates of criminal convictions were reduced to less than half (incidence rate [IR] 0.63 [0.60-0.66]) of the waiting list levels (IR 1.57 [1.54-1.60]). Above all, evidence illustrates that providing MMT in prisons can decrease illicit opioid use and criminal activity (Bukten et al., 2011; Gordon et al., 2008; Havnesa et al., 2012; Macswain et al., 2014).

Reduction in Risk Behaviours. People who use illicit substances, especially persons who inject drugs, engage in behaviour, such as, sharing of needles and paraphernalia, which may put them at risk for contracting HIV and HCV (Corsi, Lehman, & Booth, 2009; Lucas, Cheever, Chaisson, & Moore, 2001). Methadone is associated with reductions in high-risk behaviours,

such as, injection drug use, that can cause the transmission of HIV and other communicable diseases (Corsi et al., 2009; Dola et al., 2003; Kwiatkowski & Booth, 2001; Metzger et al., 1993; Millson et al., 2007). Even more, opioid substitution specifically has a great effect on drug related behaviour, including injection drug use and sharing of equipment (Gowing, Farrell, Bornemann, Sullivan, & Ali, 2011; Gowing, Hickman, & Degenhardt, 2013). To illustrate, Metzger et al. (1993) found rates of intravenous drug use to be significantly lower with people receiving treatment; weekly intravenous heroin use decreased to less than half as prevalent, 33% versus 69% $p < 0.01$, and cocaine injection, 22 versus 61% $p < 0.01$, compared to the out of treatment group. In addition, the sharing of drug equipment also decreased with the in-treatment group, 34% reported sharing needles, compared to the out-of-treatment group reporting 70% needle sharing (Metzger et al., 1993). Similarly, Ball, Lange, Myers, and Friedman (1988), in their three-year field study, examining findings pertaining to injecting drug users and needle sharing from six different methadone maintenance programs, from a sample of 388 male methadone patients, with a history of injecting drug users, there was a 71% decrease in injecting drug users from prior addiction status. Ball et al. (1988) also found evidence in a decrease in frequency of needle sharing days between pre-admission and admission with patients during treatment. However, although there was a decrease in the percentage of people who reported needle sharing pre- and post-treatment initiation, the difference was not statistically significant (Ball, Lange, Myers, and Friedman, 1988). Furthermore, in a systematic review, Gowing et al. (2006), found consistency between studies in the reduction of risk behaviours with the relative risk reported ranging from 32% to 69% for illicit opioid use, from 20% to 60% for injecting drug use and from 25% to 86% for the sharing of injecting equipment (Gowing et al., 2006; Gowing et al., 2011; Gowing et al., 2013).

Mitigating the Risk of HIV Infection with Opioid Substitution Treatment. Injection drug use can increase the chance of HIV transmission and acquisition (Gowing, 2012; Gowing et al., 2013). HIV transmission is a risk for the population of persons who use injection drugs due to the potential for the spread through needle injections and sexual risk (Patel et al., 2014). In fact, anywhere from 63 to 240 out of every 10,000 exposures to infected shared needles will result in transmission (Baggaley et al., 2006; Degenhardt et al., 2010; Patel et al., 2014). Methods that help the reduction of HIV infections in persons who use injection drugs include safe injection sites, antiretroviral therapy, and opioid substitution therapy. That being said, methadone is one form of treatment that can help reduce HIV transmission and acquisition. The decrease in drug use and frequency of injection that occurs while people are on methadone can result in reducing unsafe injections, therefore, decreasing the risk of acquiring and transmitting infections (Degenhardt et al., 2010).

Opioid substitution treatment, i.e., MMT, is a mainstay treatment for opioid dependence. With the estimated risk of HIV infection to be 0.63% to 2.4% with needles that have come in contact with HIV; there is a chance of HIV transmission for all populations of persons who use injection drugs (Baggaley et al., 2006; Degenhardt et al., 2010). In addition, approximately 17% of HIV infections are attributed to injecting drug use in Canada, and women are more likely to acquire HIV through injecting drug use than men: 29.9% versus 13.6% respectively (Public Health Agency of Canada, 2011). Therefore, because MMT is associated with reductions in behaviours associated with HIV transmission such as, illicit opioid use, injecting drug use, and sharing of injecting needles, methadone treatment is an important factor in decreasing and preventing HIV transmission (Degenhardt et al., 2010; Gowing et al., 2011; Gowing, 2012).

MacArthur et al. (2010) performed a systematic review and meta-analysis examining the effect of opiate substitution treatment related to HIV transmission among the population of

persons who use injection drugs, and found that opioid substitution was associated with a 54% reduction in the risk of HIV infection among this population: “(rate ratio 0.46, 95% CI 0.32 to 0.67; $p < 0.01$)” (p.4). Similarly, Metzger et al. (1993), in their prospective 18-month follow-up study examining the prevalence and incidence of HIV infection and related behaviours among HIV-negative opiate-abusing injection drug use both in and out of methadone treatment, found a six-fold difference in rate of seroconversion between the two groups. To illustrate, “3.5% (three of 85) of those in treatment at all points became HIV-positive by 18 months...and 22% (12 of 55) of the untreated sample seroconverted” (became HIV-positive; p. 1053). Consequently, subjects who did not receive methadone treatment were 7.36 times more likely to become HIV positive during an 18-month period (Metzger et al., 1993). Furthermore, Metzgar et al. (1993) concluded that there is a casual relationship between methadone treatment and lower levels of risk behaviour and observed seroincidence (new HIV-positive cases); however, in-treatment subjects continued to have high-risk behaviours throughout the study. In summary, methadone treatment likely decreases and prevents HIV transmission in IDUs (Baggaley, Boily, White, & Alary, 2006; Degenhardt et al., 2010; MacArthur et al., 2010; Metzger et al., 1993).

Stigma and Substance Abuse

Persons who are dependent on opioids are highly marginalized by society (Jamieson, 2002). People who use illicit drugs experience stigmatization, resulting in detrimental effects on their mental and physical health from exposure to stress, involving experiences of discrimination (Anstice et al., 2009; Simmonds & Coomber, 2009). Stigmatization results in decreased healthcare access due to decreased quality of treatment from healthcare providers and fear of authorities. Ahern et al., (2007), in order to understand stigmatization and drug use, used behavioural concepts in their definition of stigma and defined it as a person’s characteristic and/or behaviour that is contrary to societal norms (Stafford & Scott, 1986, as cited in Ahern et

al., 2007). It is a process that occurs when a person is labelled in a way that links them to a negative stereotype, therefore, reducing their individual status and setting them apart from others (Link & Phelan, 2001). This can result in separation, status loss, and discrimination (Simmonds & Coomber, 2009). In addition, stigma is extensively attributed to and accepted as causing unequal social power relations (Simmonds & Coomber, 2009). This power imbalance affects illicit drug users in that they are viewed by society as less worthy, ineligible, and less deserving than other groups, of services (Ahern et al., 2007; Simmonds & Coomber, 2009). However, persons who use injection drugs and methadone have been subjected to a moral perspective on addiction and stigma as well (Anstice et al., 2009; Ahern et al., 2007). To explain, people who use illicit drugs are not equally stigmatized and are placed on a social gradient. For example, people who use powder cocaine are often of a higher social status, perceived as wealthier than those who use heroin, who are marginalized and, often times, more stigmatized as having lower social status (Ahern et al., 2007).

Stigmatization and MMT

Drug treatment modalities can be stigmatizing and many people enrolled in MMT experience institutional stigma and stereotypical views (Harris & McElrath, 2012). From the beginning, MMT programs have been stigmatized due to the belief that they substitute one addictive drug for another (Joseph et al., 2000; RNAO, 2009). Although MMT has been an accepted treatment modality for opioid dependence, stigma continues to play a major role in MMT because it creates barriers to treatment access, retention, and success (Anstice et al., 2009). For example, the stigma associated with people being identified as ‘drug users’ is one barrier to MMT participation. This label creates a power imbalance resulting in the stigmatized person feeling discriminated against, and the stigmatizer being able to control outcomes of consequence, such as access to methadone treatment. In addition, supervised methadone dispensing and

perceived societal stigma prevent people from accessing MMT (Anstice et al., 2009), which can affect health outcomes for people enrolled in methadone (Vigilant, 2004).

According to the extant research, people enrolled in MMT experience multiple sources of stigma (Anstice et al., 2009; Conner & Rosen, 2008; Earnshaw, Smith, & Copenhaver, 2013). Conner and Rosen (2008) performed a qualitative study exploring the impact of MMT on older adult patients and their perceptions of experiencing multiple sources of stigma. Of the 24 participants interviewed, 23 reported experiencing stigma. The eight distinct stigma themes that emerged in the studying included: “Drug addiction, aging, taking psychotropic medications, depression, being on methadone maintenance, poverty, race, and HIV status” (Conner & Rosen, 2008, p. 250). Thirty-three percent of people reported experiencing three of the foregoing types of stigma, and expressed experiencing a combination of drug addiction, methadone maintenance, psychotropic medications, and a combination of, drug addiction, aging, and poverty (Conner & Rosen, 2008). Respondents in Conner and Rosen’s (2008) study reported feelings of stigma regarding drug addiction, from family and friends, healthcare workers in rehabilitation centers, drug treatment counsellors, and five out of ten individuals further expressed feeling stigmatized in relation to their methadone treatment. Experiences of stigma resulted in concealment of their methadone treatment and fear of seeking treatment (Conner & Rosen, 2008).

Similarly, Earnshaw, Smith, & Copenhaver (2013) identified how MMT patients experienced stigma: as prejudice, discrimination, and stereotypes from family and friends, healthcare workers, co-workers and employers, and others. Thirty percent of people reported experiencing stigma from family and friends and healthcare workers with an increase in experience of stereotyping and discrimination, 41.9% to 50.5%, respectively (Earnshaw et al., 2013). Furthermore, people enrolled in MMT expressed feelings of being treated differently and

less than others. With that being said, stigma continues to exist in drug treatment recovery (Anstice et al., 2009; Conner & Rosen, 2008; Earnshaw et al., 2013).

Supervised methadone dispensing exposes people enrolled in MMT to the public gaze (Anstice et al., 2009; Harris & McElrath, 2012). Pharmacist and dispensing staff play a key role in the delivery of MMT and often see people enrolled in MMT on a regular basis; between one and seven daily supervised visits per week depending on stage of treatment (Anstice et al., 2009). This interaction is important in MMT because it can either prevent or cause people to feel stigmatized. Studies have found that people receiving their methadone in pharmacies have had feelings of being ostracized, that they were undeserving customers, and also viewed as criminals (Anstice et al., 2009; Harris & McElrath, 2012). These factors are examples of institutional stigma.

Institutional stigma, also known as structural stigma, is an end result from government policies, laws, or socio-political forces that reduce the opportunities of different people (Corrigan et al., 2005). This refers to the rules, policy, and procedures that are put in place by positions of power, that in return, restrict a person's rights and opportunities (Corrigan et al., 2005). For example, institutional stigma is reflected in MMT delivery and protocols: MMT requires drug testing, supervised methadone consumption, and contracts. This causes people to be in the public gaze resulting in the potential to question and deny self-recovery (Harris & McElrath, 2012). Institutional stigma can then cause people to internalize stigma. This occurs when people feel judged, then cognitively or emotionally absorb the stigmatizing assumptions, and lastly believe and apply those assumptions to themselves, resulting in beliefs that they are devalued members of society (Campbell & Deacon, 2006; Corrigan et al., 2005). This internalization of stigma disempowers persons who are enrolled in MMT, and contributes to premature treatment dropout (Lloyd, 2010), which in turn increases the likelihood of mortality.

Methadone Maintenance Treatment and Nursing

Nurses are often the first contact for people seeking healthcare services (Go, Dykeman, Santos, & Muxlow, 2011). This allows nurses to have an opportunity to make a valuable impact on the identification, intervention, and treatment of patients with substance abuse (Sullivan, 1995). It also places nurses in a position to help reduce barriers to treatment initiation by educating others about addiction and the benefits of MMT (RNAO, 2009). Methadone patients have expressed feeling stigmatized by healthcare providers. Therefore, increasing education can help nurses become aware of their own personal attitudes and beliefs that may hinder their ability to provide healthcare (Rassool, 2010). In addition, nurses work in a variety of settings, thus making it is essential for nurses to be comfortable knowing the signs and symptoms of opioid dependence, discussing substance abuse with their patients, and to be competent in providing supportive care (RNAO, 2009). Increasing a nurse's knowledge of MMT can enhance their practice and ensure that all people receive autonomous and holistic care (RNAO, 2009).

MMT and Nurse Practitioners. Nurse Practitioners (NP) are an extended class of the Registered Nurse with additional nursing education and experience (Colleges of Nurses of Ontario, 2011). It is within the scope of NPs to use their legislated authority to diagnose, order and interpret diagnostic tests, prescribe pharmaceuticals, and perform procedures. The scope of practice of the NP is continuously changing. In 2012, the federal government changed the Controlled Drugs and Substances Act to allow NPs to prescribe controlled substances; however, the Ontario government has not changed the Ontario law to allow this practice (Colleges of Nurses of Ontario, 2014). Until the Ontario Government changes its law (Regulation 275/94 of the nursing Act, 1991), NPs are prohibited from this practice (Colleges of Nurses of Ontario, 2014). With that being said, NPs may soon be accountable for the administration of MMT. Therefore, it is important for NPs to have a knowledge base of MMT to enhance their practice

and ensure all MMT patients receive autonomous care. This increase in NPs roles and responsibility may also allow for more prescribing practitioners for MMT, allowing MMT to be accessible to more patients.

Chapter Three- Theoretical Framework

The theory underpinning this thesis arises from two main sources. The first is Hardt and Negri's (2000) critiques of the contemporary socio-political landscape, specifically those within their text, *Empire*. The second is the concept of stigma, which builds from Goffman's (1963) seminal work on this topic. Subsequent authors' work and refinements are added to provide more recent contributions that help modernize Goffman's original ideas. These two theoretical perspectives are presented below in turn.

Hardt and Negri

The proposed research will be structured using Hardt and Negri's (2000) socio-political writings on capitalism, and, in particular, those which relate to what they called the contemporary *Empire*. While such a theoretical framework could seem misplaced in this project, it is actually quite relevant; the current regulation of drug addiction appears to have become to the precise socio-political mechanism that Hardt and Negri (2000) described.

More specifically, historically, persons with drug addiction were excluded members of society, either socially or through outright imprisonment (Skoll, 1992; Valverde, 1998; Valverde & White-Mair, 1999). Over time, this exclusionary approach changed, and persons with drug addiction were brought back into a system (Gowan et al., 2012). The first of such changes was a social move toward an abstinence-based rehabilitation, in which drug use was still outright and inherently problematic, just not worth a total loss of social liberties (Skoll, 1992; Valverde, 1998; Valverde & White-Mair, 1999). The evolution of this strategy eventually led to another approach, known as harm reduction (Gowan et al., 2012). In this newer mechanism, the goal of eliminating drug use outright is removed, and replaced instead with a philosophy of using a variety of tools and technologies to mitigate or minimize some of the often-associated sequelae associated with illicit drug use, including communicable disease acquisition, overdose, crime,

and imprisonment (Gowan et al., 2012; Single, 1995). Harm reduction only works, however, when members of the target populations—i.e., persons using illicit opioid drugs in this case—actually access services, such as MMT programs.

Accordingly, because MMT requires that people access services, which corresponds with such persons entering the public gaze (through the very act of accessing MMT services), Hardt and Negri's (2000) work is relevant herein. Indeed, Hardt and Negri (2000) provide a framework for understanding power in the contemporary world, which addresses and explains a new political order for globalization (Hardt & Negri, 2000). Hardt and Negri (2000) described a coherent constitutional structure of all-encompassing power, an order they called "Empire." Because of the changes in the social regulation of illicit drug use—from outright exclusion to abstinence-based rehabilitation to structured harm reductions—the writings of these authors are, therefore, appropriate for this research.

To explain, in their text, *Empire*, Hardt and Negri (2000) described a new socio-political structure, which they posited had transformed the previous *empire* into an omnipresent apparatus that served to regulate human social behaviour from a variety of loci and centers of control. In contrast to the traditional empire, with its command center (such as, Paris during the French empire, or London during the British empire), Hardt and Negri (2000) asserted that the modern empire has no single location where power resides. Instead, the locus of control has been displaced and dispersed (e.g., Paris, London, Berlin, Washington, New York City, Los Angeles, San Francisco, Montreal, Toronto, etc.), all of which function in a conjoined unison to effectuate essentially the same outcome that was the goal, and which occurred in the previous imperial model: docility among the populous (or citizenry), and capitalist production.

In this regard, Hardt and Negri (2000) argued that society has changed in that there is no longer a single master, sovereign, ruler, or monarch. Power, or the ability to exercise control and

induce change, has been spread among a larger group of heterogeneous people in a myriad of geographical locations. Hardt and Negri (2000) explained that, in a unique and novel manner, although people continue to be oppressed and controlled by one another, power is now everywhere. For these two authors, the difference between the previous versus the current empire is their assertion that power has become “flatter,” meaning that people continue to be in positions of power, but that there are more persons in power, who are also often in more than one place. This flatness also relates to the imposition of power and control by persons who are not in positions of authority, but who enforce social rules and regulations nonetheless (for example, through stigmatization). However, while the structure may have been modified, nothing has actually changed. Societies continue to govern social order by creating rules and laws for people to follow. The end result is a socio-political regulation of human behaviour through legal regulation, social norms, and the acceptance and rejection of particular modes of action. The only difference is that there is just not one person who has all the control; it is omnipresent.

Accordingly, people who live with drug addiction continue to be oppressed, and are regulated in new and novel ways, e.g., through harm reduction programs and treatment facilities. As a society, instead of using imprisonment as a social control, integration programs help change people who engage in socially proscribed behaviour in order to make them "productive elements" of society and active subjects who constantly "ameliorate themselves."

Within their text, Hardt and Negri (2000) identified a mechanism that is key to the current imperial apparatus. This was a tripartite sequence, or what they called the “Triple Imperative of Empire,” which involves the following sequential—yet circularly interrelated—phases of inclusion, differentiation, and management (Hardt & Negri, 2000). In this sequence, one central aspect of the empire is its capacity to rule through differences. What this means is that, within Hardt and Negri’s (2000) model of socio-political regulation, differences are not

grounds for excluding a person; rather, such differences are important because the new empire functions through “a power that organizes and exploits differences” (p. 236).

To explain further, the first phase, or the face of the empire, is absolute inclusivity. According to Hardt and Negri (2000), at the point of inclusion, there needs to be neglect of all differences. That is, the inclusion phase creates an “all are welcome” atmosphere that is “blind to differences” (Hardt & Negri, 2000, p. 198). The ultimate goal of inclusion is to set aside all attributes, which could cause conflict, and achieve inclusion of all things and people (Hardt & Negri, 2000). As such, the outset of the imperial sequences involves efforts to maximize inclusion by removing the barriers that would hinder access and utilization of treatment services. Hardt and Negri’s (2000) work can thus be used to understand that an “inclusionary neutral indifference” must exist *a priori* for this idea of “universal accessibility” to be able to manifest (p. 198), meaning that all aspects of the imperial apparatus need to be available to everyone; any and all boundaries and differences that can cause conflict (and which hinder access and utilization) must, therefore, be set aside to provide universal access. Of importance, providing a service that is more inclusive does not necessarily mean creating more services; it is simply the assurance that services will be readily available and open to everyone.

In Hardt and Negri’s (2000) critique of the current capitalistic socio-political order, inclusion is the process by which corporations attempt to expand their customer/consumer bases. Within such an expansive paradigm, inclusion is the means by which more products or services can be sold to generate ever-increasing revenue. Thus, rather than building walls to prevent entry (as was a component of the traditional empire; e.g., Hadrian’s wall), Hardt and Negri’s (2000) new-age empire relies on a perpetually expanding inclusivity as its principal tenant.

Following inclusion, the second phase of Hardt and Negri’s (2000) “Triple Imperative of the Empire” is differentiation, during which, the main distinction is that difference is precisely

examined and explored, rather than simply included. Hardt and Negri (2000) expressed that differences are identified to understand what and who was included in the previous phase. Such a focus on difference, however, does not occur to exclude (i.e., to limit the inclusion that had previously occurred), but rather, to simply take stock of what was included. These differences, therefore, are accepted and validated within the imperial realm. The differentiation phase works with what it is given by sorting and filtering the unique needs of people to ensure that available resources and services are matched to the distinct needs of *the included* (Hardt & Negri, 2000). This is a process of organization (Hardt & Negri, 2000). Differentiation is defined as a process in which people are distinguished and discerned by their distinct needs, keeping in mind that every person is unique and requires different resources and services (Hardt & Negri, 2000). This phase highlights the importance of assessing people upon admission into any given program, and to ensure that their requirements and unique life contexts will be met. That is, programs need to provide individualized services that meet the identified needs of each person.

As with inclusion, Hardt and Negri (2000) described the process of differentiation in regards to capitalism. Specifically, differentiation is the process by which corporations and industries identify the precise needs and preferences of their newly included target groups. As part of this, quantitative and qualitative data collection occurs. The more in-depth these data the better because they allow for even more precise understandings about who/what was included.

The process of differentiation alone, however, is meaningless; to achieve the ultimate socio-political goal within the contemporary empire, the collected data must also be used (Hardt & Negri, 2000). The final phase of the imperial sequence, management, is, therefore, essential because it is during this phase that the collected data from the included persons/things are used to devise and implement strategies that are precisely tailored to identified target populations (Hardt & Negri, 2000). The management phase is thus the actual delivery of services and products, and

it highlights the importance of differentiation. Indeed, this phase manages the differences identified in the previous phase, and can be used to devise and implement appropriate interventions or initiatives, or sell/promote products in an effective manner (Hardt & Negri, 2000). Management, in Hardt and Negri's (2000) critique of the current capitalist *Empire*, is thus the period when socio-political goals are executed.

As part of this sequence, Hardt and Negri (2000) also emphasized the interrelatedness of each step, and highlighted that, although their tri-stepped sequence appears to proceed in a linear fashion from inclusion to management, both differentiation and management cannot undermine inclusion. In other words, the methods of differentiation and of management can neither exclude persons nor decrease an individual's willingness to be/remain included. In such a manner, inclusion is not assumed to be guaranteed, meaning that differentiation and management must occur without disrupting inclusion. This is of central importance because, if inclusion is undermined, then differentiation and management cannot proceed (Hardt & Negri, 2000). As noted in Hardt and Negri's (2000) theoretical framework, for any program to be successful, its internal aspects—inclusion, differentiation, and management—need to interact together and should not negatively affect the subsequent and preceding phases.

Hardt & Negri, The Empire, and MMT

While Hardt and Negri's (2000) writings in *Empire* were highly critical of what they felt is a current imperial-based, capitalist model of production and socio-political control, the critical nature of their text should not preclude other authors from using their text in what may appear to be less critical ways. For example, one could use the wisdom of the "Triple Imperative of the Empire" to analyze healthcare services using this three-step sequence with the goal of establishing how to provide healthcare services, which achieve the ends of reducing morbidity and mortality associated with illicit drug use. In this way, Hardt and Negri's (2000) work would

be used to understand how current systems of healthcare include, differentiate, and manage patients. Thereafter, this tripartite sequence could be used to form recommendations to modify current service delivery practices, as might be needed.

One advantage of structuring an analysis of healthcare using this framework is that, on the one hand, it allows researchers to review healthcare using a well-established and highly successful framework for capitalist expansion, while, on the other hand, it reminds researchers to remain critical of what they are doing and what they are proposing. For the former point, this means that researchers can examine how and why healthcare may not achieve its intended results from a socio-political perspective. For the latter point, using Hardt and Negri's (2000) work as the substantiating framework means, simultaneously, being critical of ideas of *improvement*, *amelioration*, *better*, *best*, *best practices*, etc. Being critical also means recognizing that, as part of attempting to decrease suffering, researchers will likely be complicit in capturing patient populations—often those who are some of the most marginalized members of any given society—within the purview of hegemonic mores and modes of behaviour.

Although the foregoing approach could be seen as co-option of Hardt and Negri's (2000) ideas, it should not be seen as such. In writing *Empire*, one of Hardt and Negri's (2000) major goals was “the desire for a world of equality and freedom,” which is how their theories can be used (Hardt & Negri, 2004, p.xi). As persons who use opioids are stigmatized and oppressed, providing treatment programs can help them be part of society. Furthermore, if the current system is working, then incorporating it into healthcare can help create programs that are more individualized and increase treatment access and use—and ultimately welfare and equality.

Lastly, this approach also addresses another issue levelled against critical theory: That, without offering any alternative strategies to address the pain, suffering, and illness that many persons around the world experience, its authors do little other than criticize the world from their

often prestigious academic positions and usually privileged socio-economic standing. Using a critical theory lens thus enables researchers to dismantle and propose alternatives. Indeed, integrating Hardt and Negri's (2000) theoretical framework into healthcare programs can increase the effectiveness of healthcare delivery. This can help the process of executing health and non-health services to protect and promote the health and well-being of people in a way that provides a coherent constitutional structure of all-encompassing power. Maximizing the proportion of people who could benefit from services could help prevent public health concerns, such as, high-risk behaviours, because people will seek treatment. To illustrate, there needs to be a non-judgmental and respectful atmosphere to engage persons in treatment programs, therefore avoiding exclusion. If healthcare services do not create an "all are welcome" atmosphere that is "blind to difference" (Hardt & Negri, 2000, p. 198), it will not maximize the proportion of persons who could benefit from these services, as a result people would likely continue to either not seek treatment services or prematurely discontinue treatment.

Stigma

Preliminary conceptualizations of stigma have been credited to Erving Goffman, who defined stigma as "an attribute that can transform an individual from a whole and usual person to a tainted and discounted one" (Goffman, 1963, p. 3). According to Goffman (1963), social identity is created within groups of people that are categorized with attributes that are ordinary and natural. These attributes, which are formed, are eventually transformed into normal expectations which people come to depend on. When a person presents with different attributes from the group and what society has deemed as normal, the person is socially devalued and discredited. However, not all attributes that are different result in stigma; stigma is a unique relationship between an attribute and a stereotype (Goffman, 1963). Goffman (1963) explained that only those attributes that are incongruous with the stereotype of what has been defined as a

‘norm’ in mainstream society are stigmatized. It is these attributes that cause people to be removed from socially constructed categories; that is to say, stigma is constructed by society (Goffman, 1963).

The original term stigma was Greek, and referred to bodily signs and physical disorders that exposed something unusual and different (Goffman, 1963). Similarly, Goffman (1963) described stigma in three different categories. First, there were abominations of the body; in other words, bodily abnormalities that include physical deformities. Secondly, flaws in individual character, such as weakness, mental health disorders, and addiction. Third, Goffman (1963) described tribal stigma with ethnicity, nationality, and religion. In all instances, people have traits that differentiate them from what society has deemed as the ‘norm’ and are separated from social categories (Goffman, 1963). People who are separated from the ‘norm’ experience a variety of acts of discrimination, which reduces the person’s life chances because it can lead them to withdrawal from society (Goffman, 1963). This can result in feelings of shame where the person accepts their attributes as failing and/or defiling, and therefore tries to correct or change the attribute (Goffman, 1963).

Although Goffman’s (1963) work on stigma continues to be used today, Link and Phelan (2001) describe a more current definition of stigma with reference to relationships between a set of four interrelated concepts that are an expansion from Goffman’s (1963) observed relationship between an attribute and stereotype. Link and Phelan (2001) describe stigma as a process that happens when a power situation occurs, which allows and/or enables acts of labeling, stereotyping, and separation. As a result, there is a loss of status and discrimination. To explain, a label is socially constructed from human differences that are socially selected and placed in categories where people are connected to undesirable characteristics (Link & Phelan, 2001). These labels are linked to stereotypes, and, in return, create a separation between different social

groups, resulting in the labeled persons experiencing status loss, reduced status from the stigmatizer, and discrimination (Link & Phelan, 2001). Link and Phelan's (2001) four interrelated components include distinguishing and labeling differences, associating differences with negative attributes, separation, and status loss and discrimination.

Component one, in Link and Phelan's (2001) description of stigma, explained that differences are socially constructed and often overlooked in society. These differences that are labelled as salient, separate people from others and create categories, and while some are singled out and considered prominent by human groups, others are ignored (Link & Phelan, 2001). This leads to the second component of associating differences with negative attributes. This occurs when those differences that are labeled are accompanied by stereotypes (Link & Phelan, 2001). Following, these labels and stereotypes proceed to a separation, component three. When people are labeled and are distinctively categorized as being different, stereotyping is easily followed and separation can occur directly from the label that was conferred. For example, a person who is labeled as a 'drug addict' or 'junkie' may be stereotyped by healthcare workers as weak-willed, non-compliant, unwilling to change, and out-of control, to name a few of their behavioural characteristics, resulting in a barrier to accessing treatment or healthcare services (Earnshaw et al., 2013). To explain, stereotypes are a set of beliefs about people who have been set apart from the 'norm' and then those beliefs have been applied to specific people who fall within that category. Lastly, after separation incurs, the fourth component of the stigma process is the experience of status loss and discrimination. It is during this stage that people begin to feel devalued, rejected and excluded from society and are put at a disadvantage to the determinants of health including income, education, psychological well-being, housing, and health (Link & Phelan, 2001). In summary, stigma exists when all four components co-occur "in a situation of power that allows these processes to unfold" (Link & Phelan, 2001, p. 382).

Integration of the Theoretical Framework

Hardt and Negri's (2000) work describes the contemporary delivery of services that are inclusive, with the central aspect of the contemporary practice of governance through differences. That is, within Hardt and Negri's (2000) model of socio-political regulation, differences are not grounds for exclusion; they are the basis of control. With that being said, the concept of stigma becomes important, and must be integrated because this concept relates to exclusion and marginalization. Indeed, stigma occurs when people present with attributes that are deemed as socially abhorrent, resulting in social devaluation. For example, persons who live with addiction are made to feel different and less deserving than others, which allows and/or enables acts of labeling, stereotyping, and separation (Ahern et al., 2007; Simmonds & Coomber, 2009). This causes unequal power relations between the stigmatizer and the individual and/or groups of people being stigmatized. Thus, allowing the stigmatizer to be in "control."

Hardt and Negri (2000) provide a framework to understand power in today's society. Through the integration of the two frameworks, the power that is used to organize and exploit the differences in Hardt and Negri's (2000) framework can help address the relational power imbalances that occur with stigma, in order to create an inclusive atmosphere. Hardt and Negri's (2000) first phase, inclusion, involves removing all barriers that cause conflict and that can hinder access and utilization of treatment services. Therefore, integrating stigma and the "Triple Imperative of Empire," can bring awareness to the concept of stigma and its affects on individuals who access health and non-health services. Research has identified that stigma creates barriers to accessing treatment, retention and success (Anstice et al., 2009; Vigilant, 2004). Therefore, Hardt and Negri's (2000) work highlights the importance of addressing stigma due to its profound affect on inclusion. Therefore, the integration of these models can help maintain a focus on inclusivity and factors that contribute to exclusion.

Chapter Four- Research Design and Methods

Design and Data Collection

This research is a descriptive exploratory qualitative research design study that collected in-depth data about a certain phenomena: i.e., the process and experiences associated with MMT (including the initiation, stabilization, and maintenance phase) from the perspectives of patients enrolled in MMT were explored. This descriptive qualitative research approach for data collection is amenable to exploring largely unanswered questions (Sandelowski, 2000), and was appropriate for this study because the objectives of this research were to understand and explore the process and experiences associated with MMT from the perspectives of the persons enrolled in MMT. Further substantiated the need for this approach is that, to date, there has been little consideration given to the perceptions and experiences of people who use MMT. As such, gaining a better understanding of MMT from personal experiences can help create a better understanding of the process of retention, which in turn, can increase retention rates in MMT programs. Qualitative research was thus an appropriate research design for this study.

Description of Setting

Interviews occurred at three different interview locations including, which are not identified to prevent the potential for identifying the study participants. These options allowed for the interviewee's to choose a location where they felt safe and most comfortable participating in the study and helped protect participant's anonymity in the community. Furthermore, to ensure privacy and confidentiality, the interviews occurred in private, closed-door rooms,. Privacy and a quiet area for the interviews ensured that full attention was present during the interview process (Polit & Beck, 2012).

Recruitment

Participants were recruited in Ottawa through the distribution of posters at all methadone

clinics, pharmacies where methadone administration took place, and community health centres. A University of Ottawa phone number and email address were provided on all advertising, and potential participants contacted the researcher for further details independently. To ensure eligibility, the inclusion and exclusion criteria were included on the recruitment posters to avoid rejecting people who did not meet the criteria. In addition, when the researcher was contacted, she screened participants for inclusion and exclusion criteria at that time. After potential participants were screened for the inclusion/exclusion criteria, the researcher gave eligible participants an option for an interview time and place, and an interview was scheduled. At the time of the scheduled interview, the researcher introduced herself to the participant and showed the participant to the interview room and verified the inclusion and exclusion criteria with the participant before beginning the interview.

Sample

First, purposeful sampling was used to recruit study participants. This form of sampling aimed to obtain interview data from participants who possessed relatively homogeneous characteristics and yet had heterogeneity of experiences with a specific topic of interest (Davies & Logan, 2012). In this research, participants who were more than six weeks post MMT initiation were recruited and invited to participate in the study if they met all inclusion criteria (Table 1). The time frame of six weeks post treatment initiation was chosen to ensure that participants had time to stabilize their physical and mental health, as well as improve their social functioning. Second, inclusion and exclusion criteria were determined to identify potential participants who, through careful selection, would aid in understanding the persons' personal experiences and perspectives of MMT. This provided information-rich data on how to improve MMT-related treatment benefits (Polit & Beck, 2012; Sandelowski, 2000). The following criteria were required for people to participate in this research (Table 1):

Table 1- Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
• Age 18 and older (For Ethics Approval) • Enrolled in MMT • ≥ 6 weeks post methadone treatment initiation	• Age less than 18 • Non-English Speaking

Lastly, snowball sampling was used. The participants were given the researchers' contact information, and asked to pass the information on to others who they believed would be interested in participating (Davies & Logan, 2012). In addition, the participants were informed they were under no obligation to distribute the researchers contact information.

The exploration of various perspectives involved twelve participants who were interviewed for this research project. This number was chosen because research indicates that when using purposive sampling, data saturation usually occurs between eight and twelve interviews, but typically has always occurred by the twelfth (Guest, Bunce, Johnson, 2006). Saturation was established through sampling to the point where no new information was obtained, and when further interviews were not adding to the findings or when the findings from previous interviews were repeating what was already known (Polit & Beck, 2012). To ensure data saturation was achieved, two interviews were added after information redundancy was achieved to ensure that no new information emerged. This strategy helped ensure data saturation occurred (Polit & Beck, 2012). In this case, data saturation was reached by the tenth interview and the last two interviews were conducted to confirm that data saturation was achieved. No new codes were added to the codebook after the tenth interview.

Data Collection and Analysis

Data Collection. At the interview appointment, the researcher introduced herself to the participant and showed the participant to the private and confidential room where the interview

took place. The researcher explained the informed consent process and asked if the participant had any questions or concerns before starting the interview. The collection of information-rich data involved face-to-face, semi-structured, 90-minute, audio-recorded interviews (Sandelowski, 2000). This type of qualitative self-report allowed participants to speak freely and provide illustrations and explanations as they chose (Polit & Beck, 2012). The use of semi-structured interviews allowed the researcher to cover the specific area of interest with guided interview questions. This data collection strategy allowed participants to raise new points when they believed it was necessary, therefore, moving data collection beyond what was already known. In addition, a written topic guide was used to guide inquiry and to ensure that the specific area of interest was covered. The researcher prepared the written topic guide, which included a list of questions or areas of interest to be covered with each participant. To elicit more detailed information, exploratory questions were included in the written topic guide to help the researcher explore and understand the participants' perspectives and experiences with MMT (Polit & Beck, 2012). The topic guide helped ensure all data required was obtained, but was just a guide, and therefore was adjusted throughout the interview process as needed.

The researcher set the direction of the interview by initially using open-ended questions. The topics included the participants' experiences and perceptions about enrolling in, receiving, and deciding to stay in methadone treatment. In addition, perceptions of what was missing from the methadone treatment program and what participants were most satisfied with in their treatment were elicited. Findings from initial interviews guided further exploration in subsequent interviews to ensure findings were fully explored. The researcher adjusted the content of the topic guide iteratively because it was driven by what was learned from the previous interviews. Therefore, data collection and analysis occurred simultaneously.

Participants received an honorarium of \$25 as compensation for their time and efforts to

participate. If participants wished to withdraw from the research study at any point prior to completion they still received the honorarium. No participants withdrew from the research study prior to completing the interview process.

Data Analysis. Latent content analysis and thematic analysis were used to analyze the interview texts (Guest, MacQueen, & Namey, 2012; Sandelowski, 2000). Latent content analysis allowed the identification of common themes and patterns and in-depth understanding of the relationships and underlying meanings in context (Graneheim & Lundman, 2003; Sandelowski, 2000). The goal of latent content analysis was to produce an understanding of what was being described by participants from their perspective. Accuracy and so-called truth-value were not important. The goal was to understand the participants' realities, worldviews, and experiences. The primary analytical purpose was to explore and understand the process, experiences, and perceptions of people enrolled in MMT.

The goal of thematic analysis was for the researcher to explore and come to an understanding of the participants' lived experiences (Guest et al., 2012). To accomplish this, the researcher transcribed and analyzed whole interviews continuously throughout the analysis process. Data analysis occurred in the following six steps.

First, immediately after the interview the researcher transcribed the interview data verbatim. This occurred for the first two interviews, however, due to the timing of the consecutive interviews, interviews three through ten were transcribed after all the interviews took place. The researcher ensured that the transcriptions were accurate and that they reflected the interview experience. The researcher checked the accuracy of the transcribed data by re-listening to the interview recording while monitoring for potential errors and alterations within the transcribed text including, miss-spelled words, omitted words, and inaccurately entered information about pauses, laughter, crying or changes in speech volume and tone (Polit & Beck,

2012). This ensured that the transcriptions of the interviews were done with rigour. Throughout this process, this researcher became familiar with the data and carefully re-read the text several times while looking for key words, trends, themes, or ideas in the data, while being conscious of every laugh, sigh, and silence. The goal of these initial readings was to ensure an overall comprehensive understanding of the interview on a high level. This researcher strived to understand and make sense of what was going on during each interview.

Second, the researcher “located meaning in the data” through multiple readings of the interview text, and engaged in discussion with the research supervisor regarding the meaning and significance of the data (Guest et al., 2012). This allowed the researcher to highlight initial interpretations of the text and potential significance to develop a category scheme (Guest et al., 2012). At this time, the researcher read the data carefully while extracting components of the text, specifically looking for concepts and clusters of concepts. Notes and headings were written in the text simultaneously while reading the interview text. The transcriptions were read through twice and notes and headings were written down in the margins in order to describe all aspects of the content. Thereafter, the important headings and/or concepts that emerged through extraction were given a label that formed the basis of each category.

Third, the codes were manually assigned to categories based on the context of the interview text and only coded if data were needed. These initial codes were compiled to create the codebook. The researcher analysed the list of codes in the codebook. In addition, codes were defined alongside coding notes that were associated with the specific text with a reference back to the raw interview data. This codebook was modified throughout the analysis process as new information and new insight was gained from the findings.

Fourth, the data were organized. This stage included the ranking of codes and the production of themes and subthemes, which centered on the focus of inquiry (Guest et al., 2012);

i.e., persons' perspectives and perceptions of methadone treatment. At this time, the researcher reduced the number of categories by combining those that were similar into broader higher order categories. The categories were compared and themes were linked together based on shared content. This process helped make sense of the categories and their properties. The categories represent the meaning that was observed in the data by the researcher (Guest et al., 2012).

Fifth, the themes were reviewed, defined, and named. All transcript data were categorized into themes and subthemes, and they were reviewed to ensure that all the data were categorized appropriately. The researcher reviewed all the categories and ensured that all the themes and subthemes that could merge together were linked; for example, all subcategories with similar events were merged as categories and categories were grouped as main categories. This resulted in three categories including sub-categories, generic categories, and main categories. This process continued until all categories were properly placed. Thereafter, the category was defined and named. At this time, each category was named using content-characteristic words that properly reflected the subject of study (Elo & Kyngas, 2008).

Sixth, the findings were interpreted and reported in a descriptive summary. The themes were expressed independently and in relation to other themes, which demonstrated a connection between the results and the data. This included a representation of the researchers understanding of the phenomena under study. Citations were used in the final report to increase the rigour of the study; this occurred while maintaining participants' privacy and confidentiality. In addition, the researcher documented all decisions and practices concerning the coding process in the codebook. Data collection was complete when this step was completed.

Rigour

The main researcher, who is a registered nurse that has completed a graduate level course in research methods, under the supervision of Patrick O'Byrne, RN, PhD, Associate Professor of

Nursing at the University of Ottawa, performed the research project. Trustworthiness of the study was sought through credibility, conformability, and transferability. First, credibility was approached in the study by illustrating the relationships between categories by providing representative quotations from the transcribed text. In addition, to ensure an accurate and comprehensive understanding of the participant's truths and realities, peer-debriefing with members of the research team was completed to ensure that the findings reflect the experiences and perceptions of the participants (Graneheim & Lundman, 2004; Logan & Davies, 2012). Second, to ensure conformability, reflexivity was used. The researcher kept a reflexive journal to review personal preconceptions of the topic throughout the study process. The goal was to minimize any imposition of preconceived concepts onto the participants and/or the data. Third, transferability was established by providing a rich and vigorous presentation of the findings including the context and participant descriptions.

Finally, audio-recording interviews and writing field notes strengthened the rigour because it allowed the researcher to continually review and analyze the raw data, and *it ensured* accuracy during data transcription and analysis (Polit & Beck, 2012). The researcher recorded descriptions of the participants including their demeanour and behaviour during the interactions, and described the interview context immediately after the interviews took place. Finally, the researcher created an audit trail to ensure the analysis process was transparent. The researcher thoroughly documented the entire analysis process and the decisions that went into the process (Guest et al., 2012). This helped the researcher to be careful and systematic during analysis.

Ethics and Human Participant Protection

The Research Ethics Board at the University of Ottawa approved this research project (Appendix C). To ensure the protection of human rights the researcher abided by the guidelines and ethical principles of the Tri-Council Policy Statement (2010) in several ways. First, based on

the researcher's experience with the topic of the interviews, it could be anticipated that the discussion could lead to participant's revealing incidents of illegal activity. The written consent form contained a check box where participants signified "I consent" by checking the box. Two options were provided to the participants, 1) agree to be interviewed and consent to be quoted anonymously, or 2) agree to be interviewed, but do not consent to be quoted anonymously. No names were placed on the written consent form to protect participants' anonymity (See Appendix B: Information and Consent Form). Second, the consent forms, transcribed interviews, and recorded interviews were kept in a locked cabinet, in the thesis supervisor's locked office, that was behind locked central doors at the University of Ottawa. The data with personal identifiers and their pseudonyms were kept in a different locked cabinet. In addition, the computers that were used for all files were password protected. Third, all participants were advised, prior to consenting, that direct quotes may be used from the interview, however all personal information would be kept confidential. Fourth, the researcher respected the rights to self-determination, meaning all potential participants had the right to consent or decline participation voluntarily (Polit & Beck, 2012). No participants in this project withdrew consent during the interview. However, if participants had withdrawn from the research project, their data would have been destroyed by deleting the recording and shredding notes using a confidential shredding service.

The major potential risk to participants was emotional upset. The researcher paid close attention to the potential risk of emotional upset and assessed for signs of distress in which case the interview would have been stopped and appropriate referrals for assistance would have been made. Participation in the study entailed that personal information was volunteered, and this could have caused people to feel emotional or uncomfortable at times. Participants were assured that every effort would be made to minimize these risks. The participants were informed that they did not have to answer questions that they did not wish to answer and they were informed that

they were under no obligation to finish the session and/or answer questions, and that if they felt uncomfortable and wished to end the session, that that was acceptable, and that the session would end immediately. If the participant experienced emotional upset, a telephone number for the Ontario Mental Health Helpline and for the Ontario Drug and Alcohol Helpline would have been provided to the participant. These helplines could provide participants with information regarding counselling services and support within their community, listen and offer support, give strategies to help them meet their goals, and provide basic education regarding mental illness and or drug and alcohol problems. This service was available 24 hours a day, 7 days a week, and is free and confidential. Participants in distress would have also been given information for a community treatment centre and the participants, depending on their situation would have been encouraged to go to the Ottawa General Hospital emergency room if further intervention was required.

Confidentiality and anonymity were ensured through the use of pseudonyms chosen by the researcher. Only the main researcher and thesis supervisor have access to information that could link the pseudonym to the participant and there is no identifying information between the consent forms and the data from each interview. In addition, direct quotations were used in the results section of this research project. However they do not include identifying information, and there were no identifying links between these quotes and the participants.

Lastly, following the completion of the research project, the data will be conserved for five years in a locked cabinet, in the thesis supervisor's locked office, that is behind locked doors at the University of Ottawa. The data with personal identifiers and their pseudonyms will be kept in a different locked cabinet, in the thesis supervisor's locked office behind locked doors at the University of Ottawa. In addition, the computers used for all files are and will continue to be secured by a password. Again, the data will be destroyed after five years; paper data will be shredded using a confidential shredding service and electronic files will be safely deleted.

Chapter Five: Results

Results

The following section details the results of this research. First, the data collection sample is presented. Second, the interview findings are presented, including a description of MMT from the perspectives of the participants, the participants experience with stigma related to MMT, and an in-depth analytic understanding of MMT. Third, a summary of the results is presented.

Sample

Using the methodology detailed in the previous chapter, 12 interviews were completed. Interviews were conducted between April 2014 and July 2014 at a location of the participant's choosing. Three women and nine men were interviewed with a mean age of 44 years. Participants were on methadone for a range of three months to four years. Of the 12 participant's interviewed, nine used MMT while concurrently using other illicit substances and three used methadone without concurrent drug use. All participants reported they had been involved in criminal activity associated with drug use, and all denied any criminal activity since initiating MMT. In addition, two participants at the time they were interviewed were attending a rehabilitation center for substance abuse, two were involved in Narcotics Anonymous or Alcoholics Anonymous, and the others were not involved in any treatment services or drug treatment counselling.

Interview Findings

Through data analysis, three noteworthy findings emerged from these interviews: description of MMT (theme one); experiencing stigma with MMT (theme two); and the responsibility and accountability of MMT initiation and use (theme three). These themes (described below) progressed from simple descriptions of services (theme one) to in-depth analytic understandings of MMT (theme three). Please note, pseudonyms have been used; that is,

the participants' names used below are fictitious. In addition, all MMT clinics and pharmacy names that the participants used have been removed from the text.

Theme One: Description of MMT

This theme contains basic descriptions of MMT including individual positive and negative self-perceptions, positive and negative attributes of MMT (as suggested by the participants), and participants' experiences with rules and policies that structure MMT services. In addition, this theme describes the system of MMT and the participant's personal experiences with the methadone clinics and their pharmacies.

Perceptions of Methadone. Participants described their personal perceptions and attributes of methadone both positively and negatively. Nine participants reported positive items; for example, one participant stated that MMT is a safe drug compared to the drugs available “on the streets,” and that it prolongs life. Josh stated, “We are getting a drug that is coming out of the pharmacy and they know that they cannot cut it with anything else....the doctor is prolonging your life.” (Josh, 1247-1257) Josh² similarly expressed that methadone was a “gift” and that it was the best thing for his relationship with his partner. He stated, “My girlfriend and I decided to do methadone as a personal gift to ourselves, and we have been doing methadone ever since.”

In addition, Katie and Julia³ expressed that they felt relieved when they initiated MMT. Moreover, participants described, MMT as saving their lives (Julia, Sarah, Nick and John) and that it has “saved” them from going to jail (Tyrell, Nick, John)⁴. John described this concisely:

I don't know where I would be right now. I probably would be in jail.... If I couldn't have started it as fast as I did I would be in jail right now for sure so it is saving me. It is giving me a chance to make the right choices ... (John, 292-300)

² (Josh, 66-69 and 1458-1465)

³ (Katie, 1081-1091) (Julia, 918-920)

⁴ (Julia, 20-24), (Sarah, 546), (Tyrell, 1413-1420) (Nick, 65-68)

Nick and Joey indicated that their personal experiences with MMT changed their lives, and that it is just the “beginning of recovery.”

I feel that methadone is the beginning of recovery for me because it helps me deal with all the negative stuff that I have to deal with ... Looking back it looks like you have light, I wouldn't change a thing. (Joey, 107-116)

... Would you rather see me on methadone or meeting you at night in the back ally with a gun pointing to your head and saying give me all your money Me now, to two or three years ago, you wouldn't like me if you met me. (Nick, 770-782)

As seen throughout these quotes, participants highlighted how they perceive MMT as a positive aspect in their lives, helping them to have positive self-perceptions, giving them an opportunity to feel safe with methadone use, and helping them avoid criminal activity. The above quote from Nick exemplifies how behaviour can change with MMT.

However, participants also described negative attributes of MMT. For example, John, Josh, and George⁵ compared methadone use to illicit substance abuse, continuing to feel like a “drug user”, and/or feeling shameful as a result of methadone. John, described this as follows: “Methadone wasn't a problem at the start but right now it's no different than using.... That's what it feels like...I think it's because I have done this to myself.” (John, 148-153)

While Nick expressed that MMT has changed his life, he still indicated that it is difficult to find a partner due to his MMT use. He stated:

I will be honest with you. Right now I am an overweight guy, not that great looking, and when I do find a girlfriend I have to tell them I am on methadone ...so it kind of scares them off. (Nick, 564-570)

Tyrell also expressed this in a similar way when he discussed his desires to cease using methadone so he could be “normal.” He stated, “Well because eventually you know it's all great but I wouldn't mind being normal sooner or later [laughs].” (Tyrell, 449-550) When the

⁵ (John, 403-412), (Josh, 550-668) and (George, 473-486, 1108-1131)

interviewer repeated, “Okay, so you do not see yourself as being normal on methadone?”, he responded with, “Oh no, no, of course not. I am a drug addict junkie, recovering junkie.” (Tyrell, 452-459) This exchange exemplifies a common finding; i.e., that MMT use, notwithstanding that it was a prescribed therapeutic agent, left them feeling as “addicts” and “junkies.”

In addition, six⁶ participants also suggested that the use of methadone is a “crutch”, and that methadone users are unable to function without assistance. Participants viewed methadone as such because they were able to quit pills independently in the past, but not opioids. In addition, participants described methadone as a “crutch” through their expressed wishes of wanting to discontinue methadone use once they are “stable.” Jack described this:

I would think well “I am on medication”. I used to have the same thing just a couple of years ago I was operating on my own steam no meds and now I am on methadone, so I am not necessarily wanting to stay on methadone for the rest of my life ... Methadone is not a permanent solution ... (Jack, 373-377 & 418-424)

I would feel viewed as someone who cannot handle life without drugs, I guess which is maybe what I am [laughed], but seriously, and I know this because two years ago I was abstinent and I judged those on methadone. I cannot deny it, that’s what it was [a crutch]. (Jack, 1162-1166)

Although two participants, Katie and John, suggested that methadone is a “crutch,” they highlighted that they would rather use methadone than use drugs. John stated:

“Well of course I know it is a crutch, which is alright ... if it gets me away from the needle and I get in the moment-because that’s half the sickness right [it] is the ritual.” (John, 752-755)

⁶ (Jeff, 738-755), (Jack, 1162-1166), (Nick, 452-461), (Tyrell, 895-908), (Katie, 587-598), and (John, 752-755)

Later in the interview, in response to the question,⁷ “how did it make you feel when you made the decision that you wanted to be on methadone?” John expressed that his decision to go on methadone was difficult due to his perception of methadone as a crutch. He stated:

“Well making the decision was kind of hard because surrendering to something you know-you know what, it is a crutch I agree with that myself you know what I mean.” (John, 876-879)

In contrast to the above statements, however, not all participants shared the opinion that MMT is a crutch. Joey, for one, described how MMT was the beginning of his recovery. When the interviewer asked, “someone perceived methadone as just a crutch, would you feel that way?” Joey stated: “Methadone helps me not run to the opioids like the ache and so I am not sick or anything. So it is not a crutch; it is the beginning to an end ...” (Joey, 822-824)

Two Participants, George (715-716) and Julia, were indifferent when the interviewer raised the point of “crutch” being associated with methadone. They expressed that it was an individual choice of how you choose to perceive methadone. Julia stated:

I don’t know, I guess it could be. Well for sure I used it as a crutch before when I was not ready to stop using. I would if I couldn’t get my drug of choice; I still have the methadone that I could fall back on and I did for a while. But it is what it is, and people have a choice they can use it for their benefit of they can use it as a crutch. (Julia, 615-621)

Although participants described negative perceptions of MMT compared to illicit drug use, one participant expressed that he had no concerns with the routine of methadone. He described it as “easier than using drugs.” He stated:

“I don’t have to go out and search around for pills, or I do not have to go out and rob somebody to get money to buy the pills or you know steal something.” (Tyrell, 194-197)

⁷ Due to the frequency with which the concept of MMT as a crutch emerged, the interviewer raised this point in later interviews with all participants.

Tyrell's quote, in combination with those above, highlighted that, while the participants reported many positive aspects of MMT, they also described negative ones, such as, that methadone can maintain personal perceptions of being a "drug user" and/or feelings of not being "normal", and that methadone is simply just exchanging one drug for another, meaning MMT is seen as "non-abstinent" – although no participants used such terminology.

MMT Services. Not only did participants describe their personal perceptions regarding MMT, they also described positive and negative attributes of MMT services. For the positive attributes, eight⁸ participants reported how MMT services, for example, helped them decrease injection drug use (both intravenous and intramuscular); this was a main reason why participants continued with MMT services, and was identified as one of their preferred aspects of MMT.

John described:

"... It gets me away from using the needle because ... half the sickness ... is the ritual. But yes it is definitely keeping me away from the needle." (John, 755-166)

Participants also reported a decrease in illicit drug use related to the therapeutic effects of MMT (i.e., blocked reception of other drugs and its effectiveness with opioid withdrawal). Five participants⁹ described how methadone's therapeutic effects have worked with their "want" for opioids and indicated that methadone was effective in blocking the opioid receptors from other drugs. Tyrell described how methadone worked for him:

... I used to wake up and that would be the first thing on my mind is where is my spoon where is my rig I am going to be sick, but I wasn't, it was all in my head... Now I don't even think about it, it's the last thing on my mind. People ask where do you buy pills ... I don't even know because I don't care anymore.
(Tyrell, 60-80)

⁸ (Josh, 770-790), (Joey, 822-824), (Julia, 638-641), (Sarah, 513-521), (Steven, 749-751), (Jeff, 927), and (Tyrell, 1488-149)

⁹ (John, 629-642), (Katie, 30-45), (Julia, 414-419), and (Josh, 383-293)

In addition, Josh (1168-1171), Katie (1092-1106) and George described the effectiveness of methadone for opioid withdrawal. George described this concisely: “I don’t have to go through [opioid withdrawal], well especially this time because I was able to get on [methadone]; it helps you with opioid withdrawal.” (George, 377-385) In addition, Steven and Nick¹⁰ expressed that the best thing about MMT was the lack criminal activity. Steven stated:

It does help ... because you’re not going out there to steal to get your dope every day and you are not hustling. You get your fix and you are very happy that you are not running around ... it keeps a lot of people out of jail for that reason. (Steven, 263-268)

Taken together, these quotes highlight the positive attributes of MMT. Participants expressed that methadone has positively affected their lives in decreasing illicit substance abuse. In addition, participants highlighted the positive role MMT has played in helping their recovery with opioid substance abuse.

While MMT has been highlighted with positive attributes, participants described many negative attributes to MMT services as well. For example, eight¹¹ participants expressed that the routine of having to go to the pharmacy everyday was compared to a “chore” and/or a “hassle” and “tedious.” Participants also described the routine of methadone as a “pain in the ass.”

According to Jack:

There is no fun part of doing methadone.... It’s a chore. If I miss taking my methadone in the morning I feel it. I ... notice a subtle change and then if I went a couple of days then I would be really sick ... It’s a chore [when] I have to go see the doctor every day and submit urine samples. (Jack, 428-474).

Although Tyrell (similar to other participants), described his doctor appointments as a “pain in the ass” he disagreed with the idea that MMT was a “chore”. He stated:

¹⁰ (Nick, (891-893)

¹¹ (Sarah, 103-108 and 172-178), (Nick, 729-734), (Jeff, 92-96), (Katie, 283-296), and (Tyrell, 1828-1838) (John, 161-170), (George, 859-873)

It's a chore to go look for ... money and then you have to find the pills and then you have to find the gear to do the pills [sarcastically]. It's a chore to go to the pharmacy and drink a glass of juice? Come on. (Tyrell, 1840-1846)

John expressed a similar point, and suggested that although going every day is a “pain in the ass” and “chore,” it is still easier than illegal opioid use, which:

Is a pain in the ass and a chore, you know, but the main thing is I do not have to resort to other things to get better. ... I don't have to do anything illegal to get that. It's there and it's for free and it's provided for me. (John, 161-170)

In addition, when George was asked what he thought was the worst part of the methadone program, he expressed that it is going to the pharmacy daily. He said:

“The most helpful thing is that I don't have to go through opioid withdrawal, but it doesn't deal with pain. [The worst part of the methadone program is] that I have to go [to the pharmacy everyday].” (George, 859-873)

Furthermore, participants described many negative attributes of the pharmacies where methadone is dispensed. For example, one participant expressed his experience with how they mixed his methadone drink causing him to change pharmacies.

They are not consistent with their drinks¹². I got sick twice because they thought they put the drink in the mix but it was just juice ... When I phoned to let them know the pharmacist was like, ‘maybe it's the flu’, and I was like, ‘No I have been taking pills, shooting them since I was 15. I know what a pill sickness feels like and I know what the flu feels like there is a big difference’. [The pharmacist] said, ‘sorry I can't double dose you, go see somebody else’, and I said, ‘well if I have to go see somebody else, I am going to change pharmacies’. (Nick, 642-663)

Jack, Julia, and Jeff¹³ expressed their concerns of going to the pharmacy or clinic as it is seen as a “trigger” for relapse. Some participants' even switched pharmacies/clinics as a result of what was happening at the pharmacy; they found it difficult to be in an environment where illicit drugs were being sold. Jack described this in the following way:

¹² Participants use the term “drink” as the term to describe their methadone doses.

¹³ (Julia, 349-355), (Jeff, 211-214)

I see lots of people I used with at that place [clinic]. It's my riskiest time to go see the doctor Friday mornings. You know that when there are addicts around there are drugs. So that's a time I like to minimize; I like to get in and out ... it's very risky for me. I am not strong enough to hang around people who have drugs. It is a big trigger. But it's once a week and I get in and out; it's doable. (Jack, 237-259)

When George was asked if there was anything that could make the program better he responded by supporting the foregoing point:

It would be nice to avoid the stuff that happens at the pharmacy. It is just people meet there to sell and buy drugs. It is definitely a trigger or a pain in the butt or something. It would be nice to get around that. (George, 353-369)

Later in the interview, George stated that his reasoning for not continuing with methadone was the clinic atmosphere. He stated, "I don't want ... be around the people at the pharmacy or at the doctor's office." (George, 1186-1189) When asked if he had been to other pharmacies George expressed, "yeah, from what I have seen they are all the same." (George, 1193)

John, on the other hand, did not feel that sitting in the waiting room with others who could be using drugs was a trigger; however, he could see the issue. He explained: "I never get offered drugs at the clinic ... I do see people have them and I know where to get them and I guess that could trigger me perhaps by seeing these people...." (John, 1215-1219) Josh also expressed that it could be a trigger due to drugs being accessible: "Yeah I guess, there are dealers there all the time and people are going to buy [drugs] if they feel they need it." (Josh, 910-911)

Although six participants described experiences with either the pharmacy or clinic being a trigger for relapse, Nick and Joey¹⁴ did not feel this way. Nick said, "No, when I see someone coming in there [pharmacy/clinic] like I used to look like after a three-day binge and they're all just worn out and haven't showered or bathed ... I know I don't miss that at all." (Nick, 307-320)

¹⁴ (Joey, 200-210)

In addition, Josh, Jeff, and Tyrell¹⁵ expressed another negative aspect of MMT services was related to pharmacy hours. When participants don't have carries the pharmacy hours make it harder for them to get their methadone. Josh indicated that the pharmacy hours of operation had caused him to concurrently use illicit drugs at times. He stated:

... If we miss our methadone, especially weekends, because it's really easy with different hours they're open and if you're into the drugs you're up late and sleeping late. So you wake up and you lose track of what day it is ... and it's closed so you go back to the street for your dose. (Josh, 69-75)

Later in the interview, when asked what parts of the program were not helpful, Josh stated, "Some people might think the hours, you can't beat the hours, seven thirty to six o'clock on weekdays ... but on the weekends it is only until two o'clock I mean other cities I think you can get that [methadone] 24 hours a day." (Josh, 1176-1180)

Participants also described their experience with methadone clinics. Participants highlighted their experience with MMT initiation and the length of time before they were able to start on methadone. Four participants (Katie, Steven, Jeff, and George)¹⁶ described their experience with the length of MMT initiation time, which averaged from one week to two or three months before they were able to start on MMT. George and Steven expressed that they had differing experiences at different clinics. Due to the delay in initiating MMT Steven and George¹⁷ switched to a methadone clinic where there was no waiting period and they were started on MMT the same day they sought treatment. Katie described complications with MMT initiation and that she was not told why she needed to wait before starting methadone. During her first experience with MMT initiation Katie said:

¹⁵ (Jeff, 485-492), (Tyrell, 854-859)

¹⁶ (Jeff, 54-57) (Steven, 50-53) (George, 101-105)

¹⁷ (Steven, 98-99) (George, 86 and 101-105)

I went to [clinic name] and I told them that I needed to go on methadone because I had a problem with heroin and I needed to get off it. I was tired of being drug sick, and they interviewed me and they told me I had to wait like two months to start ... I used, but I tried to slow down on my using. (Katie, 250-254 & 266-270)

In addition, Josh, although he started methadone the same day he went to the clinic to initiate MMT. He described his experience as a lengthy process and more difficult than going to “use in the streets.” Josh said:

They gave me some lengthy document to fill out and it was like fill out this form or go to the streets. It was easier to go to the streets because I have my phone and it was “are you coming” and I was in the middle of an appointment ... We [me and my girlfriend] started our application and the doctor was there and you have your urine test and you drink your drink right after (Josh, 106-114 & 147-149)

Later in the interview Josh described his partner’s negative experience with not being able to get back on methadone, because she missed three drinks and there was not a physician available at the clinic. According to Josh:

[My] girlfriend missed her drink for three days and they [the clinic] have a policy that you are cut off methadone if you miss your drink [methadone] for three days. You have to go back to your doctor and do a urine test and start at 30 [methadone dose]. So if you are at 60 or 80 so be it. (Josh, 153-160)

When questioned if she can find another practitioner, Josh said:

We are working on that. I went to another site and they kind of have a twisted policy. They want her to go in and fill out their paper work instead of sending her old paper work there, and they want her to go in and do her urine samples and then they will call her with an appointment. (Josh, 165-174)

These experiences highlight the participants’ perceived variability in MMT initiation time between different clinics. In the above scenario, Josh illustrated the difficult process of initiating methadone. Josh described the struggles he had with the application process as well as his partner’s experience with trying to change methadone clinics, which he reported as resulting in her “going back to the streets” to find relief from illicit injection drug use.

In addition, Jack, Julia, and Katie¹⁸ described their feelings of not being cared for, and expressed that they sometimes felt like a “number.” For example, Jack left his first clinician because he was not feeling cared for. He stated:

I left the first doctor, and I didn’t really have a lot of information from the doctor, I didn’t feel like... I was bring cared for to be honest with you ... basically I just felt like another number, just run it through the mill you know. (Jack, 588-605)

Although three participants expressed that they had experiences with feeling “un-cared” for at certain clinics, Tyrell disagreed with the statement of feeling like a number at his clinic (different from the above two participants). He stated:

Not really. I don’t know, I guess the doctor is just doing his job ... he has a lot of people to see. No, I never really felt like a number. They know who I am when I walk through the door, they know me by name and stuff. (Tyrell, 634-637)

Overall, these quotes highlight that different experiences occur at different clinics and different people have different experiences at the same clinics. The length of time from seeking help to initiating methadone is at the discretion of the clinical staff. It was also suggested that the way the clinic is run changes the participant’s perception of being “cared for.”

Another negative attribute the participants described related to the process of providing urine samples. Two participants described providing urine samples as humiliating and uncomfortable. Katie expressed that she did not previously like giving urine samples because she found them degrading, but now she does not feel anything. Katie stated, “It does not make me feel anything anymore ... before it was degrading, because I knew I was being videotaped going to the bathroom.” (Katie, 1171-1177) In addition, Sarah described giving urine samples as, “kind of uncomfortable ... you have to line up to go give your urine sample, it’s kind of uncomfortable.” (Sarah, 139-142) When Sarah was asked what makes it uncomfortable, she said:

¹⁸ (Julia, 306-314) (Katie, 908-910)

“Well you’re lining up and giving a urine sample. There are people in front of you and behind you and it is kind of uncomfortable, I don’t like that part at all.” (Sarah, 146-148) Later in the interview when Sarah was asked what could make the methadone program better or what would she fix, she said: “No more urine samples, I don’t know, it should be more confidential or something should be done about it.” (Sarah, 396-401)

In addition, John and Jeff (150-155) indicated that providing urine samples was a “burden” and a “waste of time.” John said:

It doesn’t bother me It is kind of a burden having to do it. But it’s not like there is someone over my shoulder watching me do it. There is a little camera and a little window behind me but it’s not a big deal. (John, 829-836)

Steven (732-733) and Tyrell expressed that they were “fine” with giving urine samples and not worried about this process. Tyrell stated, “ I’m fine. I don’t use benzos or volumes or anything like that. I use cocaine once in a while. I use THC that’s it, and [the doctor] knows it, so you know I’m not trying to hide anything from anybody.” (Tyrell, 546-548)

It is important to note that the process of providing urine samples resulted in a distinction across gender lines. As shown above, this negative attribute to methadone and urine samples was greater for women than men. The women found this part of the methadone process to be more uncomfortable and degrading and eventually some women were desensitized to this feeling after repeated exposure. On the other hand, the men described providing urine samples as more of a burden and “waste of time.”

Furthermore, it was suggested that a methadone-delivery-only program is not beneficial. A methadone-delivery-only program is a program where people use methadone with no concurrent addiction treatment counselling or support. Two participants expressed this differently, but in similar ways. When John was asked if he planned on continuing with MMT for a while, he stated:

For sure, I am on it now and it's not something that you just take away. I want to get a program in to my life and then start coming down and wean myself away from it. Just methadone by itself just doesn't work for me. (John, 1130-1135)

When the interviewer expressed that a lot of people need methadone plus other services, John responded: "Well of course. I have to be doing something I can't just take the drink and expect that life is going to be-it's not like the drink is just a cure right." (John, 1140-1146) Likewise, when Katie was asked if there was anything missing in the methadone program she suggested that she would like someone to talk to and not just medical care. Katie expressed this in the following way: "Maybe a social worker, that you can go ahead and talk to, but its stuff that the doctor does not have time to listen too." (Katie 758-763) She denied receiving other services.

When asked what they would suggest to add to the program or what they thought was missing Julia, Sarah, and Jeff¹⁹ similarly highlighted the need for support services with MMT: Sarah said, "Well they used to have counselling, but they should set up counselling again, so you can check in with the counsellor once a week and see how you are doing." (Sarah, 742-743) Moreover, when the participants were asked if they found services easily accessible four²⁰ participants expressed that they did indeed find services accessible. Jeff stated precisely, "Oh yeah there is whatever you want ... it depends if you are serious or not. You can find whatever services you want. It is out there. If you want help it's up to you to look for it." (Jeff, 1090-1096)

However, while some participants identified the need for a methadone system combined with support services, other participants have said that if services were offered, they would not use them because they either a) were not interested in using them at this time or b) chose not to

¹⁹ (Julia, 987) and (Jeff, 708)

²⁰ (Julia, 999 & 1028-1029), (John, 911-912), and (Nick, 948-949)

seek further assistance for addiction and/or mental health. Five participants²¹ expressed that they would not use services if they were offered. Some explained that they were not ready, and others expressed that they were just not interested. For example, despite the fact that John voiced that a methadone-only-delivery is not effective, he stated that even though services are accessible he is not ready to use them at this time. He said, “There are always services readily available it’s just I’m not ... doing [that] right now. I am not part of any type of community whether it is a fellowship or anything. I am not really doing anything and I know that.” (John, 908-929)

A basic description of MMT and how the participants’ perceived it emerged. It has been highlighted that MMT can cause positive and negative self-perceptions. Although participants reported that MMT “saved their lives,” they also noted that MMT could continue to make them feel like “drug users,” “addicts,” and “junkies,” and prevented them from feeling and living what they described as a normal life. This negative self-perception affected MMT initiation and usage. In addition, participants described many attributes, both negative and positive, to the system of MMT services, including the routine of going to the pharmacy, pharmacy hours, and pharmacy and clinical services. Participants drew attention to the different atmospheres of both pharmacies and clinics and how different atmospheres had different effects. For example, some participants felt that their pharmacy was a trigger, while others did not. These attributes that have been identified can all have an impact on the service of methadone delivery and participant experience.

Theme Two: Individuals’ experiences with stigma and MMT

The second theme related to the participants’ experiences with stigma and MMT. This theme was the outcome of what participants said in relation to methadone, the disclosure of

²¹ (Tyrell, 655-659 and 11467-1471), (Josh, 693 and 697-717), (Julia, 1011-1015).and (Steven, 810-819 and 823-827)

methadone use, feelings of judgment, their healthcare experiences, and the places of MMT services, including clinics and pharmacies. This theme examines the participants' experiences with stigma in different ways, including self-stigma, stigma and dependency, stigma experienced with the healthcare system, places of stigma, and individual experiences with marginalization.

Self-Stigma. Throughout the interviews, participants described their feelings of self-stigma in multiple ways, for one, by describing themselves and their self-perception. Participants referred to themselves as “not normal” and as “junkies.” For example, Nick reported how his MMT use would “scare off” potential partners. He said, “When I do find a girlfriend I have to tell them I am on methadone ... so it kind of scares them off.” (Nick, 564-570). Tyrell also expressed this when he talked about wanting to stop using methadone. He stated: “It’s all great, but I wouldn’t mind being normal sooner or later [laughs].” (Tyrell, 449-550)

In these quotations, participants described not feeling adequate or “normal” when talking about their methadone use. Participants also expressed that this was a reason why they did not want to continue to use methadone for a long period of time. In the above quotations, it was moreover suggested that stigma was perceived as a feeling of not being “normal” compared to an idealized, albeit unstated, social norm.

In addition, Tyrell stated that he felt he was perceived differently (from and by others) due to his methadone use. He stated: “I would imagine so yeah, for sure, people look at you like you are a junkie right.” (Tyrell, 258-270) When he was asked explicitly if he ever felt that way, Tyrell responded, “No. I have, never, except when you are sweating, when you are sitting there sweating and it’s cold out ... and no one else is sweating and you are just dripping then it’s kind of embarrassing.” (Tyrell, 266-270) Tyrell expressed that he “imagines” that people might look at him like he is a drug addict “junkie,” although he is not sure this has happened. That is, Tyrell expressed that he has never had an experience where he felt that people treated him differently or

looked at him like a “junkie;” however, when he described the effects of methadone use, he found himself feeling embarrassed in such social situations.

Likewise, John expressed feelings of shame related to MMT use: “...I guess there is probably a little bit of shame that... I’m on methadone, I struggled with opioids a long time and I would go to jail and I didn’t have a choice, I had to quit ...” (John, 403-412) In the above quote, John spoke of feeling ashamed when he thought of being on methadone and that he was not able to quit using opioids without assistance. In the context of this analysis, this made him see methadone users as unable to function without assistance, as seen in theme one. In this theme, of importance is the participants’ associated perceptions, such as feelings of shame and stigmatization, which can be described as the stigma related to methadone use. Other participants expressed similar feelings. Jack, for instance, first expressed his feelings of MMT not being a permanent solution, and then continued by stating that he felt judged because he was unable to handle life without drugs. He stated, “So far it is not a permanent solution for me ... I’ll probably stay on it for another year.” (Jack, 418-424)

I would feel viewed as someone who cannot handle life without drugs, I guess which is maybe what I am [laughed], but seriously and I know this because two years ago I was abstinent and I judged those on methadone. (Jack, 1162-1166)

In addition, Jack and Tyrell²² expressed negative feelings toward methadone and how they used to “judge” others on methadone prior to their enrolment. Jack expressed this as follows:

Before I got on methadone I was in the program clean and sober and I was abstinent, and I sat in a group and there was a few people on methadone and I had judgments. I said to myself “well how can you-no wonder you can’t feel you’re on methadone,” ... So I had the judgment that many others do have. (Jack, 321-335)

In the above quotation, prior to initiating methadone Jack had judged others who used methadone. Jack also suggested that methadone use precludes “being clean.”

²² (Tyrell, 879-886)

Furthermore, participants highlighted the visibility of stigma. Tyrell and Josh²³ expressed that one positive attribute of methadone was that they did not have to “hide” their arms anymore. (This related to “hiding” the signs of injection drug use, such as, needle marks.) Tyrell voiced this in the following way: “...So I can wear short sleeves in public and I don’t look like a junkie.” (Tyrell, 1488-1449) Josh and Tyrell, both expressed that they feel “better” on methadone because they don’t have to “hide” the signs of injection drug use. Previously, using intravenous drugs caused them to have marks or abscesses on their arms, which they felt identified their drug use. Likewise, Jeff described how he self-identified as a drug user in the following way:

It’s always having to have your arms covered up, you know what I mean abscesses and stuff like that. People robbing you, you know what I mean. It’s a different life style completely. (Jeff, 956-962)

In this quote, Jeff highlighted the shame he felt with having to cover up the signs of his injection drug use, including marks or abscesses. He expressed that injection drug use is a differently lifestyle compared to his methadone use, in that it can occur more covertly.

In summary, the above quotations highlight the participant’s negative thoughts and feelings about methadone. Their experience with self-stigma was identified in multiple ways, such as, not feeling normal, feeling ashamed, and feelings of not being able to function without assistance. The participants in this study described stigma and stigmatization through their own feelings of self and through the perceptions of others. Lastly, the participants highlighted their experiences’ with visibility of stigma, by expressing that they used compensatory mechanisms, such as covering their arms, to hide the physical characteristics caused by intravenous drug use.

Stigma and Chemical Dependency. The second type of stigma the participants described related to chemical dependency. In addition to the above findings, the participants

²³ (Josh, 770-790)

perceived methadone use as being dependent on a substance to function and that MMT is seen as “non-abstinent.” This was expressed in multiple ways, including the emphasis that methadone was a “crutch,” and not a long-term solution. Seven²⁴ of the participants explicitly expressed their desires to discontinue methadone use; indeed, all participants envisioned total abstinence (which included no MMT) as ideal. Consequently, the participants viewed MMT negatively because it was less than the idealized state of no drug use. Any chemical use or dependency was devalued. Jack exemplified this point with his experience of stigma and chemical dependency:

I would feel viewed and judged. I would think well “I’m on a medication.” Just a couple years ago I was operating on me own steam, no medications, and now I’m on methadone, so I am not necessarily wanting to stay on methadone for the rest of my life (Jack, 369-377).

In the above quote, Jack expressed his perceived stigma of not wanting to be dependent on a “drug” due to his feelings of being judged by others. This was highlighted by most participants through their statements of wanting to discontinue methadone use with their desire to be “normal.” Tyrell expressed this point in the following way:

I want to get off it. I want to walk away from opioids all together. Actually I want to start coming down from my [methadone] dose ... I wouldn’t mind being normal sooner or later ... I don’t want to be dependent on it. It’s liquid handcuffs really ... (Tyrell 436-510)

Nick also explained that he wanted to discontinue methadone when he was stable and after his interferon (Hepatitis C) treatment. When Nick was asked why he would want to discontinue methadone when it worked for him, he described his reasoning for discontinuing methadone as a result of unstated influences from his family regarding his dependence on methadone. It was noted in the interview that Nick was concerned about what his family thinks of him, specifically in relation to being on methadone (he attempted to discuss this in the following quotation).

²⁴ (Tyrell, 1450-1453) (Jeff, 61-68 and 82-96) (Julia, 383-403) (Nick, 493-509) (George, 476-482 and 635-637) (Steven, 155)

You know what I often thought that after I got all my carries and I just have to see the doctor once a month I wouldn't ... see my family... But I need to just start thinking of me and myself instead of what my family thinks. (Nick, 523-527)

Thus, for Nick and other participants the stigma related to MMT dependence caused participants to want to discontinue methadone use, even though it has been working for them.

In addition, Julia and George²⁵ also suggested that they do not want to be dependent on methadone as they described their feelings of not being abstinent while on methadone. They stated that they wanted to be “completely” abstinent off all drugs and that MMT is perceived as “non-abstinent”. Julia expressed this point in the following way, “... My next step is staying abstinent from all drugs and then I will look at after two years being abstinent of coming off the methadone. I want to be completely abstinent off everything.” (Julia, 383-403)

In addition, George reported his cycle with methadone use. He explained that he goes on methadone and stops using methadone, and as a result relapses and resumes methadone. When asked if he is scared to stop methadone again due to a chance of relapse he stated:

Yeah, I just try. I would rather do it on my own. I don't want to have to ... be around the people at the pharmacy or at the doctor's office. I don't want to get up so high that maybe it will deal with the pain...but.” (George, 1157-1206)

Above, George described his experience with discontinuing methadone. George would rather not be dependent on methadone, although he reported relapsing multiple times after discontinuing methadone. He expressed that he does not like to be around “people at the pharmacies or clinics” but simultaneously reported struggling with “the pain.” His experience is thus of not wanting to use MMT, i.e., of wanting to “do it on [his] own,” while also being concerned of “the pain.”

Taken as a whole, the quotations described the participants' feelings of stigma related to anything other than total abstinence, i.e., from “doing it on your own.” This belief thus

²⁵ (Julia, 383-403) (George, 1157-1206)

manifested as a stigmatization of any chemical dependence, including MMT. MMT was perceived as non-abstinent, as a result participants expressed that they felt “judged” by others and that they are not “normal” because they feel that they replace one drug for another. This meant they wanted to discontinue methadone so as not to be chemically dependent.

Fear of Stigmatization. The participants’ experiences with stigma was also illustrated when the participants discussed their fear of stigmatization. This was highlighted through three²⁶ of the participants “fear” of disclosing to others that they use MMT, and was based on their assumptions that society/others would stigmatize them for MMT use. Participants said they do not “announce” their methadone use due to concerns they will be stigmatized. Jack described a situation when he had experienced stigma when he disclosed that he was on methadone:

I had one family member that was like it [methadone] is just a crutch ... “what do you need that stuff for?” I got that from some family ... and you know ... I really haven’t told too many people that I am on methadone. (Jack, 1192-1201)

Other participants described similar experiences. Nick, Tyrell, and John²⁷ described stigma as feelings of being worried about what their family will think. Nick, Tyrell, and John suggested stigma as a feeling of shame regarding MMT. John expressed that his family knew he was “clean” but then when he relapsed he chose not to disclose he “reached out” for methadone. Nick, as above, described how his father reacted when he found out that he was using methadone:

My dad, just wanted to know what it was ... I was like, well it’s harm reduction and my dad was like “what the hell is a harm reduction” ... When it comes to drugs he is like it’s just a switch just turn it off. (Nick, 538-553)

In addition, Julia²⁸ and George expressed that they would not share with their employer that they are on methadone due to concerns regarding stigma and discrimination. For one, Julia expressed

²⁶ (Nick, 564-570) (Jack, 361-369 and 369-377) (Katie, 135-155)

²⁷ (Tyrell, 1027-1034) (John, 264-267 and 272-273)

²⁸ (Julia, 836-849)

that, “people are not supposed to discriminate but people do,” and George explained his fear of disclosing methadone in relation to losing his job, he stated:

No, well I knew one guy who gets his morphine daily and they heard about it, and they phoned him up and said we don’t think you should be doing your job on your medication and he said well its for pain and they said well they don’t think you should be doing it. So its kind of weird, so no I think it would be the same if I were on methadone. (George, 914-924)

Although George and six other participants illustrated their experience with stigma when disclosing they are on methadone, Joey did not have the same experience. He expressed comfort disclosing MMT use. He stated:

I don’t hide it ... Even in the recovery circle, if someone asks me why I'm not using I tell them I'm on the methadone program. I don’t hide it. I'm an open book. It’s the secret to recovery” (Joey, 373-376 and 384-387)

When asked if he has ever been criticized for being on methadone, Joey expressed:

Some people say you are not abstinent if you are on methadone, but that is their opinion. I am taking a medication prescribed by the doctor, that’s just like being prescribed opioids and following the doctor’s orders taking it. So does that mean you are not sober because you are taking opioids that the doctor has prescribed for you? So it is their opinion. (Joey, 392-401)

In the above quotations, Joey expressed that he is not scared to disclose that he uses MMT. He acknowledged that some people do not see methadone use as being abstinent, but then described that he does not let that bother him, and compares MMT use to other prescribed medications.

Taken together, the above quotations described the participants’ feelings of stigma related to their fear of stigmatization with disclosure. Participants expressed that they do not feel “safe” disclosing they are on methadone due to concerns regarding stigma and discrimination from society/others. Some participants described not being able to reach out to their family in fear that they will be “judged” as a result of preconceived assumptions that methadone is, “non-abstinent.”

In summary, it was evident that the participants experienced stigmatization while on MMT. The participants expressed their feelings of stigma related to chemical dependency and

their fear of stigmatization with disclosure. Ultimately, it was noted that participants do not feel they are abstinent on methadone, and wish to be abstinent from all drugs. Based on the interview data, this describes abstinence related to stigmatized perceptions of drug use and MMT.

Stigma Experienced with the Healthcare System

Stigma with Healthcare Providers. In addition to identifying the participants' general concerns regarding stigmatization, it was also noted that the participants described experiences of stigmatization from healthcare providers. In some cases, this resulted in participants not seeking treatment due to their experiences with being treated as "drug seekers." Moreover, participants failed to seek treatment due to the experiences they have heard from other people.

Katie described her experience with avoiding hospitals due to the stigma related to methadone:

I went to the hospital with a bad migraine ... about six months ago to get a shot of Demerol because I couldn't stand the pain anymore and there was no way they would give it to me because I was on methadone I don't usually go to the hospitals, I avoid them like the plague, because of the judgment. Like I mean once they find out you are on methadone they automatically think that you are a drug addict. (Katie, 179-187; 203-223)

Katie's experience shows the stigmatization she has perceived from healthcare providers. The words used to stigmatize people on methadone were reported as "drug addict" and "drug seeker." When she went to the hospital to seek care for pain she feels she was refused treatment and "dismissed" by providers, which caused her to leave without receiving care. Whether this refusal of care related to a medical contradiction for Demerol or was a bona fide manifestation of stigma, the result was that Katie interpreted it as stigmatizing. This, in turn, caused Katie to avoid the hospitals and/or healthcare services. Jeff shared a similar experience:

I was in with my back and they knew I was a drug addict and one of the nurses said all you do is ring the buzzer for drugs ... but you know I needed it for the pain in my back. (Jeff, 278-287)

Jeff expressed feelings of being “dismissed” by healthcare providers. He was seeking medication for pain and because he was labeled a “drug addict,” he felt his complaints of pain were not taken seriously. Julia and Steven²⁹ also expressed that they did not receive help when they went to the emergency room during an episode of withdrawal. Julia described her experience:

The only judgment I have ever felt from being in the hospital ... was when I first started using opioids [recreationally] and I was going through withdrawal.... I was in a complete panic and freaking out and my mother brought me to the [name] emergency room and they didn’t want to hear what was going on. They gave me pamphlets and told me to go home and that they couldn’t help me. I couldn’t believe that, that was really harsh. (Julie 505-527)

The above quotation described Julie’s experience in seeking healthcare. As above, irrespective of the providers’ intentions in the situation described, Julia felt dismissed when she sought help.

Sarah and Tyrell³⁰ additionally expressed that they avoid emergency rooms due to the experiences other people have encountered including being looked at as having a “problem” and being dismissed by healthcare providers. Sarah and Tyrell described:

Sarah related the experience of peers who “...went off methadone. I went off methadone “cold turkey” and I didn’t want to go to the hospital and tell the nurses “I’m coming off methadone” because [the nurses] really treat you like shit ... I haven’t had experience but I know other people that have had experience with that.” (Sarah, 453-459 and 463-464)

That is why I don’t bother. I have learned from other peoples mistakes, because it does, it goes right on your health file, drug seeking, and then you will never get a narcotic prescription ever.... (Tyrell, 1558-1568)

In the above situations, Sarah and Tyrell described their apprehensions toward using healthcare services as a result of concerns they will be stigmatized, which was described as being “treat[ed] like shit.” It was also noted that there is a fear of being denied certain medications, pain medication, and healthcare workers not trusting the patient when pain is verbalized. In contrast to

²⁹ (Steven, 544-554)

³⁰ (Tyrell, 1537-1543 and 1547-1554)

the above quotes, Nick expressed that he would use emergency rooms if he had to; however, he expressed that he has had no experience with the healthcare system, including emergency rooms. Nick³¹ stated, “Oh yeah I would use an emergency room if I had to, but I would just notify them that I'm on methadone so whatever counteracts it don't use it.”

In summary, the above quotations highlight stigma the participants' perceived in their interactions with healthcare providers. The participants' fear of being stigmatized was also noted. Participants identified being labeled as drug addicts and drug seeking. In addition, feelings of being treated poorly and differently from others were also described throughout their experiences, all of which impeded access to care. As a result, due to their perceptions of stigma, some participants did not seek treatment or avoided healthcare interactions.

Stigma with Recovery Support Services. Not only did the participants highlight their experience with healthcare providers, but also they described their feelings regarding NA and AA support services. Multiple participants reported disliking group therapy, especially when attending NA meetings on methadone. Five³² participants reported feeling they would be stigmatized as not abstinent if they disclosed their MMT use. For example, John said, “I have [disclosed] but you know they kind of look at it [methadone] as you are not clean right. I haven't been to one of those meetings while on methadone no. I know people do judge....” (John, 375-399) In addition, John and Katie³³ expressed that they found NA meetings to be exclusive, which made the participants “feel alone.” John described this in the following way:

... I went there for a year and 14 months and a lot of people didn't even know my name and I knew everybody's name and it's like it's kind of cliquey and it's kind of hard to get in. Some people walk in there, and they're in there for a month and

³¹ (Nick, 754-756)

³² (Jack, 276-300) (Julia, 797-804) (Joey, 422-426) George, 441-455)

³³ (Katie, 685-697)

everybody is talking.... Well I felt like I was alone there a lot of the time. (John, 596-609)

One other participant even highlighted that NA meetings can be a trigger for relapse.

I prefer to go to the AA meetings rather than the NA, because NA meetings, the first time I went there I went there for cocaine and I wanted to go and get high right after because everyone is telling stories about getting high. (Steven 685-694)

Steven's quote highlights how NA meetings are a trigger for relapse.

In summary, the participants described their feelings of fear of stigmatization and their experiences with stigmatization when it comes to attending AA and NA meetings. As a result, causing some participants to avoid support groups.

Place of Stigma. Participant's reported that the place of methadone delivery could promote stigma. The participants expressed that the geographical location and the physical buildings of methadone clinics can contribute to stigma. Participants expressed this in multiple ways. For example, Jack expressed his feelings of the place of methadone delivery:

I don't know. Maybe they need to call it something else, package it in a different way and no one will know. There is always that thing "the methadone clinic." Methadone clinics ... get this bad rap in the neighbourhood and everyone says oh yeah that's the clinic, and that's where they're all hanging out. Maybe if we didn't have to have that kind of thing more people would get the help. (Jack, 1247-1257)

Nick expressed this similarly when talking about how the methadone clinic is labeled, "The size of this [methadone clinic name] is huge ... The addiction thing ... a lot of us like to keep the whole anonymous thing going." (Nick, 711-722) Nick said how the label 'methadone clinic' does not allow the participants to maintain confidential and anonymous treatment. The above scenarios suggest that the place of methadone delivery promotes stigma. Jack and Nick both expressed that if methadone were portrayed or "packaged differently," then maybe the stigmatization related to methadone could be reduced. Jeff confirmed this perspective about the methadone clinic when he

stated, “alienate you, yes. They see you go in and out of that drug store there and they know, they think we are all drug addicts you know what I mean. We are normal people, too.” (Jeff, 301-305)

The above scenarios suggest the participants’ feelings of how the methadone program can create or foster stigmatization. Words such as “packaged differently” and “keeping it anonymous” illustrate how the place of methadone can create a stigmatized atmosphere because it does not allow the participants to receive anonymous healthcare when the clinics are labeled overtly. This is in part due to the stigmatization that is attached to MMT, including feelings of being perceived as “drug addicts” and “not normal.”

In combination with the above scenarios, Jeff illustrated how going in to a pharmacy, which has a majority of methadone patients, can make an individual feel ostracized. Community awareness of methadone clinics contributed to feelings of alienation, preventing anonymity. Jeff expressed that he feels the community treats people, who use methadone, differently and feels that the community perceives methadone users to be “drug addicts” and “not normal.” Again this was compared to the idealized social “norm” of society. Participants³⁴ expressed how they feel comfortable in a methadone only delivery atmosphere rather than being integrated with the general public. John described this concisely:

I feel very safe at the clinic I go to ... I find it very safe and they keep it safe ... at the pharmacy the majority of the costumers are ... methadone patients. So going to any other pharmacy I don’t know what it would be ... because there would be ... other people, it would be more integrated right, probably be looked at different perhaps by other people, judged perhaps. (John, 225-234)

It was described that participants do not feel stigmatized when everybody in the pharmacy is receiving methadone and they are in an “isolated area.” It is suggested that if the participants

³⁴ (Tyrell, 593-615)(Josh, 918-919)

were to receive their methadone in a pharmacy that also had patients who were not enrolled in MMT that they would feel “isolated,” “alienated,” or “judged” by others in the pharmacy.

Taken as a whole, the above quotations describe the participants’ feelings of stigmatization as feeling “looked at” and “judged” by others who are not enrolled in MMT. It was suggested that participants feel safe when the majority of patients are enrolled in MMT at their pharmacies, as a result of feeling less stigmatized. To conclude, participants highlighted how the place of methadone and can promote a stigmatizing atmosphere.

Marginalization. Based on the analysis of the participants’ interview data, participants’ experiences with marginalization were highlighted throughout. Two forms of marginalization were found in the interview data: 1) the participants’ experience with social isolation and exclusion, and 2) the participants’ experience with feeling marginalized by their community. For example, one participant expressed that he associated mainly with other people who use methadone and people who are in recovery. Jack expressed, “To be honest with you, I don’t really associate lately with many people who are not in recovery (hits hand on table), except well at school.” (Jack, 1198-1214) Here, Jack described how he does not associate with many people who are not in recovery. This can be seen in relation to support, but in the context of this analysis, methadone use can create an exclusionary atmosphere. In support of the foregoing point, when John discussed his plan to stay on methadone:

I am not ready to go off it. It’s not something I want to be on for a very long time. I find it really affects my energy levels. I don’t feel like I have the drive. ... Like I suffer from depression, so with this it isolates me and I feel like I’m kind of stuck in a light depression. When I’m on this, it kind of numbs me. It’s not as strong as an opioid or a narcotic, but it does numb me so it doesn’t allow me to feel as well. I don’t know I don’t really have the energy. It’s hard to explain. (John, 174-198)

In the above quotation, John explained that he felt isolated on methadone. It was unclear whether it was his underlying depression or the methadone itself that resulted in his feelings of isolation.

Later, in the interview John³⁵ explained he was seeing a mental health worker, but that it was, “going nowhere,” so he stopped. As part of his social isolation and marginalization, John also voiced that he does not have a large social network:

It's pretty much me and my girlfriend. I don't really have anybody else you know. I talk to my mother and my father, they live about an hour away from Ottawa, so I don't really see them. I don't drive.... (John, 249-267)

The above excerpts, describe John's isolation with the fact that he did not access other services.

John also highlighted that he does not have anyone in his life except his girlfriend, who is also on methadone. Later in the interview when talking about different services being available and accessible, John expressed:

I was very active with both fellowships [NA and AA] there for a while for a while a good year and a while it really did help and honestly when I stopped going to those meetings is when everything started to you know. ... I have but you know they kind of look at it as you're not clean right and you it's ... I haven't been to one of those meetings while on methadone I haven't no. (John, 367-382)

There is probably a lot of stuff that have been cut out but there is a lot of stuff that's out there you know just being part of your community of some sort helps right and that's something I am not doing right now. I am not part of any type of community whether is be a fellow ship or anything you know what I mean I'm not really doing anything and I know that. (John, 923-929)

In the above quotations, John expressed that he used to be part of NA and AA fellowships and he explained that he is not reaching out for those services at this time because he is unsure of how people will look at him while on methadone. John also explained that he is aware that he is not a part of his community or reaching out for other services. John expressed:

I'm pretty isolated right now because my energy levels and as I say when I start smoking the crack I get a little bit depressed I just want to stay at home and isolate myself it's not healthy being like that I guess. I don't really know a lot of people that aren't users in Ottawa right.... (John, 1039-1070)

³⁵ (John, 211-215...249-267)

The above quotation described John's isolation from his support network and friends. He is not ready to reach out to others, and MMT exacerbates his social isolation and exclusion. Seven³⁶ participants highlighted that they do not have a social network; Josh expressed this precisely:

That I don't have. I have me and my girlfriend, we hang with each other and we do our things together and she is sick right now and I'm partially sick ... The methadone is helping and I'm hoping she could get her tests and get back on the methadone soon.... (Josh, 480-486)

The above quote highlights the social exclusion and isolation that can occur from families and communities. Many participants described that they have very few people in their life to use as a support network, or that they are not ready to connect with people in relation to drug use. This can be understood as both a contribution of exclusion and withdrawal from others. Whether due to stigma or judgement, however, the end result is isolation.

In contrast to the above quote, Julia expressed that she has a lot of support and she counts her "blessings" because she knows that a lot of people don't have anyone else to turn too:

My family and some long-term friends ... I am very fortunate. I see other people around me, other addicts and they don't have anything, they have lost everything and they can't go back and repair it, so I count my blessings (Julia, 182-194)

In addition to participants feeling socially isolated, many participants shared their thoughts and experiences with marginalization from the community. When Tyrell was asked how he felt about the community not wanting methadone clinics in their neighbourhood, Tyrell stated:

They have a right to say that because their shit is going to get robbed. I don't blame people for that at all. I don't blame people for not wanting to have a salvation army by their house or a shelter because that's what those people do: they break into your shit; they steal shit; they break into your cars' that's what they do. The reality of it is you know maybe they have about 20% who actually get help, but 80% are there to utilize it. Basically they are being enabled. They are enabled to smoke crack and do drugs all day. (Tyrell, 1665-1668)

³⁶ (Tyrell, 1045, 1047)(Jeff, 454-552)(Sarah, 577-605)(George, 676-690)(Joey, 679-735)(Nick, 580-592)

Tyrell later in the interview went on to express:

They look down on us. But you know realistically we are maybe what 1% or about half a percent of the population. We are a plague in society. We really are people who use opioids and shoot up in the alleyways. It's a dirty habit, it really is. It's a plague. It's not good. I approve of methadone clinics, but when people say they don't want them beside their houses, I don't blame them for that you know what I mean you guys have a million dollar condo you don't want to look down and see a bunch of junkies sticking needles in their arms. (Tyrell, 1733-1754)

Tyrell highlighted the marginalization he feels from society and described methadone users as a “plague” to society. He understands why communities would not want methadone clinics in their neighbourhood. In fact, John had internalized the mainstream social discourse regarding drugs and persons who use illicit drugs. Similarly, John also shared feelings of “understanding” how the community feels regarding methadone. He stated:

It's ignorance because of a lacking of understanding, but I can understand that because it brings a lot of that type of people to their area right ... That's right I guess I'm kind of just being judgemental you know what I mean admittedly I have done things that are illegal for my habit so you know, not everybody has that that is going there for that as has made bad choices you know what I mean but you can put a brain in the same box but that's what people do right. (John, 1242-1252)

Above, John described feelings of marginalization by describing methadone users as, “that type of people.” He felt that communities have a right to marginalize methadone users because of what methadone clinics “bring” to their communities. Likewise, George shared similar feelings:

I can see why the community wouldn't like them because all of the people that hang around Well yeah the people that go there aren't nice like you know there's a lot of stuff that goes on I don't blame them. (George, 1279-1290)

As above, George described people using methadone as, “all of the people” that use the methadone clinics. He also expressed that he agrees with the “outside” community not wanting them in their neighbourhood due to the associated stigmatized actions. George also felt that you cannot change the environment of the pharmacies or clinics, he stated, “there is a lot of people on

methadone that still smoke crack, like no you're not going to change it."³⁷ Josh also expressed feelings of marginalization, and how he did not 'blame' the community for having negative feelings toward methadone users. First, when Josh was asked by the interviewer if he felt comfortable sharing that he was on methadone, he explained:

It's a normal factor in my neighbourhood. It's common, methadone is getting to be very common.... So there is a lot of use and drugs and there is a lot of people that has either been ordered by the courts or did it on their own. (Josh, 536-546)

Josh, however, still stated how he understands where the "outside" community is coming from.

I don't blame them I really don't want it in my neighbourhood either ... people in this neighbourhood are dirty and business rely on our business the drug dealers and the prostitutes their all merchants.... You don't believe how many people do nothing but look and see what they can steal from you.... (Josh, 1367-1398)

Taken as a whole, the participants identified their experience with social exclusion and marginalization. Multiple participants expressed not having a social network or anyone in their life that they can turn to. On the other hand, some participants identified their social network as people who are also in recovery. In addition, participants identified that they have internalized the stigma. Participants expressed their feelings of not being "wanted" and society having a "right" to not want them in their neighbourhood, as a result of the stigmatizing actions, including crime that is attached to this stigmatized group of people who use methadone.

In summary, multiple sources of stigmatization were identified. First, individual experiences with stigma in relation to MMT including, self-stigma, chemical dependency, and fear of stigmatization. Second, the stigma experienced with interactions with healthcare providers and with support services, including, NA and AA meetings. Third, the place of stigma, it was highlighted that the place of methadone can promote a stigmatizing atmosphere, in the clinics and

³⁷ (George, 1293-1298)

pharmacies. Lastly, the participants experiences with marginalization and social exclusion were identified. In the following section, an in-depth analysis of the data on healthcare provider-patient relationships and the accountability and responsibility of MMT are presented.

Theme Three: MMT and Responsibility, Responsibility and Benefits, and Paternalistic Relationships

The third theme related to the ideas of MMT and responsibility, responsibility and benefits, and paternalistic relationships. Unlike the previous themes, the findings in this theme relate more to what was unsaid, rather than what participants stated. That is, this finding relates the assumptions and beliefs that underpinned and substantiated the participants' statements. The three important assumptions identified were 1) the idea of MMT and responsibility, 2) the idea that healthcare providers function as moral authorities and service regulators, and 3) the idea that there is an aspect of a paternalistic patient-practitioner relationship in MMT.

MMT and Responsibility. The first noteworthy point related to MMT and responsibility, which multiple participants described differently. In particular, Julia described this point when she reported her struggle with “re-joining society” and having to assume a novel “responsibility and accountability” for her health. Julia expressed this in the following way:

The first four to six months I struggled. Just not willing to stop using I guess and being accountable and responsible. Making it to the pharmacy before it closes and making it to my doctor appointments and making my urine screens. ... When you are using you become a 24 hour user. There is no more responsibility, that stuff is gone. Your only responsibility is to your addiction, so when you have to join society it is hard. Trying to juggle both worlds doesn't work.... (Julia, 213-233)

In the above scenario, Julia described her feelings of MMT as a responsibility. She described the struggle she faced when she started methadone. She highlighted her struggle with MMT by explaining the difficulty she had with re-joining society and the “responsibility and accountability” she felt she had for her own health. Supporting this point is Jeff's quote:

I would like to wean myself just because I don't get carries and holidays and stuff like that. [So] I have to come here first and get my drink and then go do what I have to do. So that's the real downfall for me. ... When you want to go away you have to plan your life around it or buy some methadone to take with you. (Jeff, 775-779 & 833-836)

In the above quote, Jeff suggested that MMT is a responsibility through his explanation of having to “plan his life” around his MMT. Having to go to the pharmacy first (commitment) to get his drink and then continue on with his life, he described this as a “downfall.”

In addition, participants' commitment (responsibility) to methadone was described as a “chore,” “tedious,” and a “hassle.” Jack and Sarah described their point in the following way:

There is no fun part of doing methadone, there's nothing fun. ... It's a chore. If I miss taking my methadone in the morning I would notice a subtle change and then if I went a couple of days I would be really sick ... It's a chore: I have to go see the doctor every day and submit urine samples. (Jack, 428-474).

That was kind of tedious, having to go every day, because you have to be totally clean off everything, I mean if you do any sort of substance like if you smoke crack at all or anything like that you have to go every day. And I smoke crack so I have to go every day and it's tedious. (Sarah, 103-108)

In the above quotations, Jack and Sarah described their commitment to methadone as a daily “chore” and as “tedious,” suggesting that there is a responsibility attached to MMT services. In addition, Nick, Katie, Tyrell and Jeff³⁸ further support this point and described their experience with the routine of methadone as a “pain in the ass.” Jeff summarized this finding succinctly:

A chore? Na it's up to you. It's not a chore. It is your decision to go there you know what I mean, I don't know if it's a chore or not, it is a pain in the ass everyday getting up and going, but anyways it gets you out of the house. I'm not one to hang around the house anyways. (Jeff, 534-539)

As can be seen in this quote, in addition to Jeff describing MMT as a responsibility, he also described it as “pain in the ass” having to go every day. Jeff also expressed that although methadone is a “pain in the ass,” it is a choice to take on the responsibility of MMT.

³⁸ (Nick, 729-734) (Katie, 283-296) (Tyrell, 1828-1838) (Jeff, 92-96 and 534-539)

Taken as a whole, these quotes suggest that MMT is not simply a treatment, but also a commitment. Although some participants explicitly stated that MMT use was a responsibility which made it difficult to “re-join” society, others described the responsibility and commitment of MMT with words, such as “chore,” “hassle,” and “pain in the ass.” Such an idea regarding MMT transforms our understanding of MMT from pure healthcare into the idea that participants have a duty or obligation to fulfill, which means that, as a result, participants could be considered as being at-risk of “failing in their responsibility.”

Responsibility and Benefits. In addition to the idea that there is a responsibility attached to MMT, participants described how healthcare providers functioned as moral authorities and service regulators who rewarded so-called responsible behaviour. To explain, the participants recounted how healthcare providers provided MMT as a reward for good behaviour. For example, when the interviewer asked Sarah how she felt about carries, she stated, “I think it’s good because at least it gives you an incentive for something to work towards.”³⁹ Sarah described her feelings towards carries as a positive attribute to methadone as it is seen as an incentive for good behaviour and something to work towards. (Carries decrease clinic visits, thus a reward for good behaviour.) In combination with the foregoing point, Julia described carries as a “benefit” that enabled more control over one’s life. Julia expressed this as follows:

I had full carries. I worked my way up and received full carries and had them for six months. To me carries are good because you have them at home and you can take your drink whenever throughout the day. It’s your own schedule. But as far as having to still be responsible and accountable for it it’s pretty much the same, it only cuts a few days out of having to be at the clinic ... It has benefits: you are not chained to the pharmacy. (Julia, 699-707).

In the above quote, Julia highlighted the benefits of carries as having more control over her life and not being “chained” to the pharmacy. However, Julia also felt that having carries did not

³⁹(Sarah, 502-504)

change her feelings of “responsibility and accountability.” These were still present. In addition,

Nick described how carries can be used as a reward and punishment:

I had four carries and I went out and actually pissed dirty that once. I had a little slip up; he took every carry away except for Wednesday...well it pissed me off because I thought they were only supposed to take one away at a time but they didn't. ... I am glad he did because it just shows me the severity when you screw up. (Nick, 274-288)

Nick described, in the above quote, the reward and punishment system related to MMT; where in relapses are not overlooked. Nick stated he was “punished,” with the doctor “taking away [his] carries,” which required him to demonstrate “responsibility.”

Participants however described their challenge with receiving carries as having to wait a long time without relapsing, which discouraged them from making efforts. Nick, for one, when asked how he felt about working towards carries and the chance of losing them, responded:

It should be if you slip up once you lose one, and as for going up, you shouldn't have to wait almost a month two months before you get another. The first time you get a carry, make it a month, but make it two weeks after that, make it a half a month. It makes you feel good when you get a carry, it makes you feel trusted: I can actually do this now; I have will power and it feels great. (Nick, 915-932)

In the above quotation, Nick described his feelings of how being able to receive carries made him “feel good” and “trusted.” Although he described how working toward carries was challenging, when he did receive one, he felt it was rewarding and gave him something to hold on to and continue to work toward. Again, this highlighted that MMT and the use of carries function as a reward. If a clinician judges that a patient made a so-called “bad decision” then the clinician could (would) “punish” him/her by removing carries. However, if the patient was “responsible” (i.e., complied with the rules of MMT), then he/she would be “rewarded.” Nick also described this power dynamic with another doctor when he started methadone for the first time:

At first I didn't know what I was getting myself into but when he starts talking to you, he will tell you, ‘if you are here to jerk me around, if you want a drink so you can just not be sick then that's fine and I will give you a 20ml drink every day and

that's fine because I am not having you overdose. But if you want help he goes then I will definitely help you.' I never told him any lies and we had a straightforward relationship. (Nick, 835-845)

John highlighted this point further in describing his "bad choices" how they affect him. He stated:

I have to get up and go see the pharmacist every day because I do not get carries because you need to have clean urine screens right, and because of my bad choices right, I do not have the carries right. (John, 141-144)

I put myself in that situation because of my bad choices. I have to go there and get my drink. I haven't earned that right and I think that's good. I think like after four weeks of being clean you should be rewarded with maybe a carry, not eight weeks because eight weeks is a long time. After four weeks, if I got a carry I feel like a reward. It's like NA, after 30 days you get that key tag; it makes you want to get the next. So where it's four weeks, and I have to go another four more, I don't make it. I had one drink, one carry, I would feel like I had accomplished something and it would give me more incentive to continue. (John, 841-865)

In the above scenario, John described the idea that the practitioners who provide MMT enforce "appropriate" behaviour in that they can "punish" and "reward" patients based on their actions.

John made what he called "bad choices;" therefore, he was denied carries. He expressed that carries are an earned right (a reward), and because he has not made the "right" decisions he cannot earn trust from his practitioners; the result: no carries. Likewise, Katie and Sarah described their relationship with their practitioners and their experiences with carries as follows:

I told him, 'my husband overdosed on my methadone, can you give me my carries for the week'. He said no I'm taking away your carries and he said you are going to have to come in now every day and get your drink and like I mean he wants a police report and all the police report says that my husband overdosed on my methadone and my valium and that's it. I mean he is not being charged so I cannot see me getting back my carries and I'm going to have to start all over again...that pisses me off. I feel like he is not listening to me and it makes me feel like a piece of shit. My trust now with my doctor is low. (Katie, 1373-1383)

I accidentally went off it because I got offered crack. I had my carries taken away and then I missed my drink and then next thing you know they want three clean urine samples and I said I am not going to give you that and then I said screw it I'm just going to quit. I had all my carries for six years straight. (Sarah, 468-472)

Here, both Katie and Sarah expressed their frustration with losing their carries. Although different situations were described, in both situations, practitioners took away something that the participants felt they had worked hard to accomplish. MMT, in these cases, thus served as a reward; behave responsibly and receive carries. Julia also described a similar situation:

I was clean for nine months and I had a relapse. It was a really bad relapse, it was a binge for about five days and I used pretty much everything I could get my hands on, so when I went in to see the doctor and told him about the relapse he was fearful. He was like there was no way he could give me my carries after that, but he made it clear that If I got myself back on track and stayed on track, he would work with me to give me back my carries. I didn't do it. (Julia, 731-739)

Julia described her relapse and how she lost all her carries. Julia went on to highlight the dynamic between her and her healthcare providers when she expressed that if she was to get back on the “right track,” that her practitioner would work with her and give her back her carries. Again this illustrated the idea that healthcare services—and the practitioners who provide them—function as rewards for “good” behaviour; i.e. when someone is responsible and receives a carry it makes them feel trusted. Jeff described how he felt carries were based on a trusting relationship:

If you don't have carries it makes it hard, that's why I am going to quit. I want to go on holidays and what am I going to do with my methadone? I am supposed to get it every day. I don't really like that I can buy methadone off the street. I know that, but the point is they don't offer that service like they don't trust...it should be...it's a trust thing. What I feel is they don't trust you. I am [number] years of age I should be able to take five bottles and control myself. (Jeff, 489-505)

In the above scenario, Jeff described his feelings of not being trusted by his methadone provider, which meant that he was not able to receive carries. Jeff did not “follow the rules and policies” i.e., he did not behave “responsibly,” and therefore was allegedly not trusted. As a result, Jeff was not able to have carries. Without such carries, Jeff was more regularly supervised (whether at the clinic or pharmacy), which he described as making it more difficult to be on methadone. In contribution, Joey expressed his feelings about the rules and policies of MMT:

At first I found it annoying. One time there was a mix up with the doctor and I missed three drinks and then I had to start right back down to 30mg which was painful you know he worked with me to get me back up to my regular dose so it was an uncomfortable two weeks until I got back to my regular dose but that's just the rules and accept the rules as they are and move on you know. (Joey, 438-445)

In the above scenario, Joey highlighted that not only can carries be used as a reward for “good” behaviour, but methadone doses can also function in this manner. If a participant misses a dose then he is brought back down to 30 mg (as per the methadone protocol), but if s/he “cooperates” with the doctor, s/he will “work with you” to get a person back to their original methadone dose. In the context of this analysis, Joey stated that you “accept” the rules of healthcare and move on, suggesting a practitioner-patient power imbalance. The rules and policies are dictated by the practitioners and are to be followed or else there are consequences to follow.

Paternalistic Relationships. Through analysis of the interview data a paternalistic patient-practitioner relationship regarding MMT was highlighted. Based on the participants’ descriptions, healthcare providers functioned as moral authorities, and had to provide methadone safely (MMT can result in overdose). Although the safety of prescribing methadone is important, the participants did not describe this throughout the interview data. Instead, they described a paternalistic patient-practitioner relationship. Katie suggested this in the following way:

The most helpful thing in the program is having to see the doctor and having a healthy fear of having him take my carries away if I were to use something.... That's when it scares me, but I will never overdose on my methadone because I won't hurt him [the doctor] that way. (Katie, 828-834 and 983-986)

In the above quotations, Katie described fearing her doctor removing methadone and carries, and stated this as a positive attribute to MMT. Katie also explained how she used methadone correctly not to disappoint her doctor, thus suggesting a power dynamic between herself and her provider. Through analysis, this described a paternalistic relationship with her doctor, in which the provider functioned as a social regulator. The clinician enforced “appropriate behaviour”; for

example, do not disappoint, and being able to punish and reward with more or fewer carries.

Likewise, John described his relationship with his methadone provider as follows:

My doctor knows ... where I am at. There is nothing to hide from him. He knows what I am doing, he knows I use crack, not using the opioids...It's embarrassing because I would stay clean for a month and you need to have eight weeks clean before you get carries. I would get clean for four weeks and then start using. He calls it you're on the B team or the A team. I am on the B team. I am not ready to go on the A team because I got to make that first step myself. (John, 469-481)

John explained his relationship with his doctor and described how his doctor separated his patients based on harm reduction versus non-harm reduction behaviour. In the context of this analysis, people were separated as demonstrating “good” versus “bad” behaviour. John, later in the interview, explained how methadone was used as a social regulator:

If I started to work tomorrow Dr. [name] would give me carries so I didn't have to worry about leaving work so I can get to the pharmacy to have all that, no one wants to make that move right, so yeah they do work with you. I think the system is geared properly like you know to work with everybody. (John, 1180-1185)

In the above quotation, John suggested that if a person made socially acceptable choices (e.g., following the rules established by healthcare workers), the practitioners prescribing methadone would provide rewards. In contrast, when someone does not follow these rules, these rewards are limited or revoked. Thus, the policies of MMT change if a patient follows such rules, for example, by getting a job and being a positive addition to society. Again, this illustrated the idea of healthcare and paternalism where the healthcare workers are placed in a position of power.

Taken as a whole, it was identified that MMT is not only a treatment, but also a “duty” of people enrolled in MMT. Participants described this responsibility and accountability as a “down fall” and a “struggle” when having to “re-join” society. In addition, carries were also highlighted as a positive attribute to methadone because it is an incentive for the participants to work toward, but also used as a reward for “good” behaviour by the prescribing practitioners. As a result, this caused a power-dynamic relationship, where prescribers function as a moral authority to control

patients. This was illustrated in multiple situations as described by the patients when they either (a) lost their carries, as a result of a relapse, or (b) missed a follow-up appointment.

Summary of Results

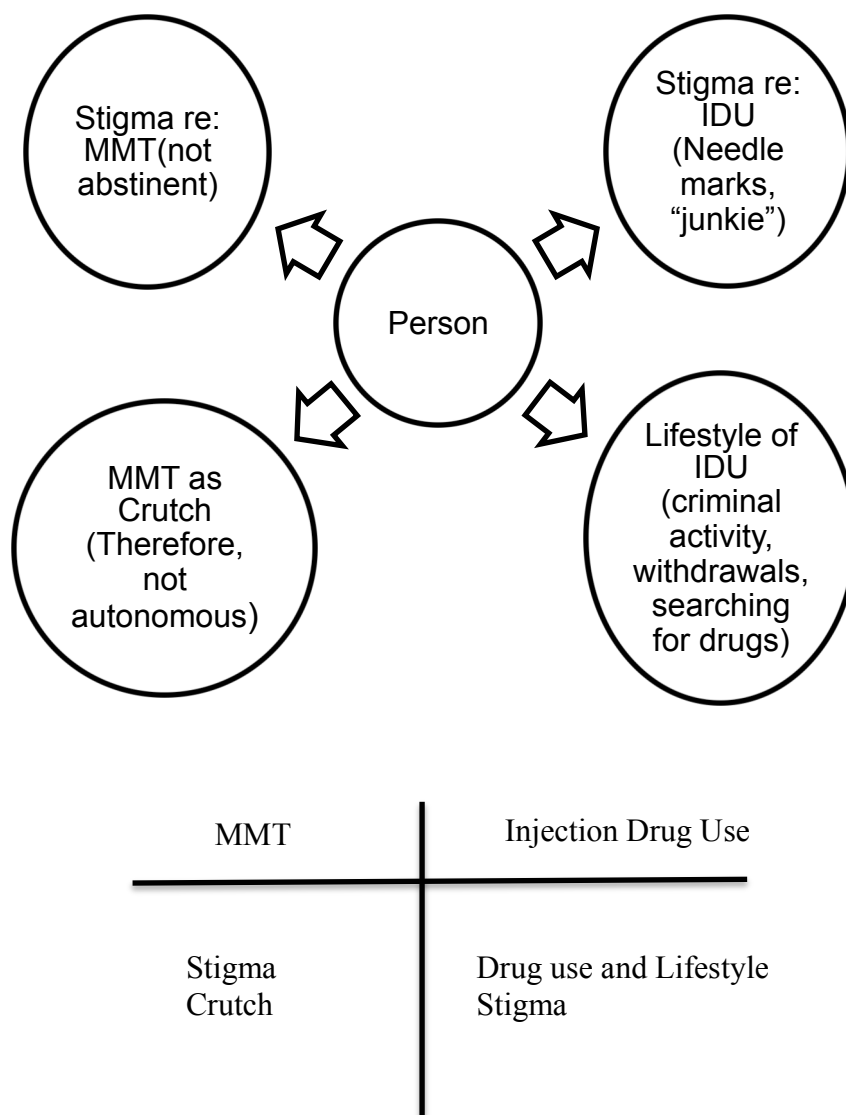
In summary, the results identified a basic description of MMT and its structure, including positive and negative attributes, multiple sources of stigma regarding MMT and injection drug use, and the socialization and maintenance of social behaviour through MMT (physician as “parent” rewarding good and bad behaviour). In addition, a seemingly contradictory relationship between the participants, MMT, and Stigma (Figure 1) was revealed. Participants felt that they do not want to use MMT due to the idea that methadone is just a “crutch”, and therefore not an outright cessation of drug use. However, it was also revealed that the participants did not want to resume injection drug use as a result of stigma attached to the lifestyle of injection drug use.

In other words, the data revealed an internal contradiction within the participants. On one side, the participants reported not wanting to continue with MMT because of the stigma attached to MMT and that methadone is viewed as a “crutch.” Here both positive and negative aspects of MMT exist simultaneously. MMT helps people stay away from “needles,” takes away the worry of withdrawal, and helps reduce the need to go “searching for drugs” every day. At the same time, however, people are exposed to negative self-perceptions including feeling like “drug users,” “addicts,” and “junkies.” Participants also identified experiences with stigma in relation to MMT including self-stigma, chemical dependency, and fear of stigmatization.

On the other side, there is drug use and its lifestyle and stigma regarding injection drug use. Although participants stated that MMT was not an “ideal” treatment option, as a result of the negative aspects identified above, and they wished to discontinue MMT at some point, the participants did not want to resume injection drug use. Participants identified their involvement with criminal activity, experiences of withdrawals, and the continuous searching for drugs. In

addition, participants identified the shame they felt with injection drug use including, hiding the signs of injection drug use, which they felt identified their drug use.

Figure 1. Contradictory relationship between MMT, IDU, and Stigma.



In Figure 1, the arrows in the first diagram represent the directions in which the person is being pulled. For example, the person did not want to be on MMT due to the stigma associated with methadone, but at the same time, they also did not want to resume injection drug use. The second

diagram illustrates the contradictory relationship which is occurring within people enrolled in MMT. It displays an internal relationship between MMT versus injection drug use. Persons enrolled in MMT have a negative association to individual perceptions of self as continuing to be a “drug user,” feelings of not being “normal,” and feelings of shamefulness that they are on methadone as a result of not being able to “handle life without drugs” and the idea that methadone is a “crutch.” Individuals enrolled in MMT experience stigma in relation to MMT and the idea that it is not the ideal treatment option, but they are faced with not wanting to resume injection drug use due to the lifestyle of drug use and its associated stigma. Participants described the lifestyle of injection drug use as a continuous circle of “searching/seeking for drugs,” experiencing symptoms of withdrawals, criminal activity, and experiencing the visibility of stigma (hiding the signs of injection drug use including marks or abscess on arms or legs). To conclude, the participants emphasized that they wanted to “beat the needles” on their own without methadone; however, they did not want to restart injection drug use. It is here that the person’s actions, feelings, and beliefs are in conflict with each other. This dynamic internal relationship produced an ongoing interplay between MMT versus no MMT.

Chapter Six: Discussion

In this chapter, the three noteworthy findings that emerged from data analysis are critically examined and discussed. These findings were as follows: First, the participants illustrated that, overall, they liked MMT services, but not without criticism, which related to MMT access and program utilization. Second, the results highlighted the participant's experiences with stigmatization regarding MMT and injection drug use. Specifically, this raised the point that stigma is an experience, interpretation, or feeling, and that it can involve a repetitive cycle that hinders access to and/or retention in treatment. Third, these data showed that MMT was seen as more than "healthcare." It was identified that MMT was not only a treatment, but also a connection between healthcare and the enforcement of responsibility, causing an imbalance of power and control between patients and prescribing practitioners. This can both increase and decrease access to MMT services and program utilization. These three findings will be discussed in detail. Thereafter, important limitations of the study will be described.

Discussion Point 1: MMT Barriers and Service Access

Although the participants identified positive perceptions and attributes of MMT, they reported multiple barriers that hindered MMT access and utilization. The result of these findings: Participants' descriptions that the MMT system was not inclusive; in fact, it was very exclusive⁴⁰, and decreased the ease of MMT use. For example, the participants felt that certain MMT clinics had a wait time for MMT initiation and others did not. As a result, participants may have had to wait to initiate MMT, while continuing to use illicit substances, or it could have caused the participants to "shop" around for different clinics. As noted in the results, one participant explained the situation his partner faced with having to change methadone clinics and re-start

⁴⁰ Exclusive is defined as the process of being excluded. To deny someone access to or bar (someone) from a place, group, or privilege (Dictionary, 2015). The opposite of being inclusive or included.

methadone, including re-submitting patient intake forms because files could not be transferred from one clinic to another. In this situation, this caused the individual to “go back to the street,” i.e., resume illicit injection drug use. In other words, the MMT initiation process was described as time consuming and more difficult than was continuing to use illicit substances, and that it was difficult to change from one methadone clinic to another. These data highlighted the participants’ perceptions about the variability of MMT initiation time, intake processes and documentation, and the inability to transfer from one clinic to another, which are a few examples highlighted by the participants that hindered access and MMT retention.

The second barrier identified that hindered access and utilization was stigmatization. Many participants highlighted negative-self perceptions in relation to MMT. Participants expressed that while being enrolled in MMT they continued to feel like “drug users” and “addicts.” Participants also identified that they did not feel “normal” and were “ashamed” they were enrolled in MMT. In addition, participants expressed feelings that methadone was a “crutch,” causing them to feel that they cannot “handle life” without drugs.

In light of the extant literature, such findings were unsurprising. Persons who are dependent on opioids have been traditionally highly marginalized by society (Brands et al., 2002; Jamieson, 2002). Background research has shown that MMT programs have been stigmatized due to the belief that these programs simply substitute one drug of addiction for another; as a result, MMT has been stigmatized from its outset (Joseph et al., 2000; RNAO, 2009). Furthermore, other research shows that society discriminates against and stigmatizes people who are enrolled in a methadone program as still being “addicts” because they are not enrolled in abstinence-based treatment (Isaac et al., 2004). As a result, many participants expressed that their length of being enrolled in MMT was ideally temporary and that their intentions were not for long-term use. However, retention in, and long-term use of MMT is important and required to

achieve optimal outcomes such as, reductions in substance abuse, criminal activity and recidivism, and HIV and hepatitis transmission (Gossop et al., 1999; Villafranca et al., 2006).

In addition, it was also observed that the place of methadone, including the pharmacies and clinics, could create a stigmatized atmosphere, which could hinder people from engaging in treatment programs. It was identified herein, however, that participants felt the way MMT clinics were labelled could create or foster stigmatization. One point was that participants could not receive confidential healthcare services when the clinics they attended were labeled “methadone clinics.” The participants used phrases such as “packaged differently” and “keeping it anonymous” when discussing feelings of being treated differently because they use MMT. A parallel could be made here to sexually transmitted infection services, which are often labelled in more confidential ways. Often times, for example, there is no label to identify sexual health centres; instead, it is just the street address. With that being said, to “package” methadone clinics differently, they can simply remove the identifying labels of “methadone clinics” to provide their patients with anonymous health services.

Of further interest, research has identified that supervised methadone consumption exposes people to the public gaze (Anstice et al., 2009; Harris & McElrath, 2012). Corrigan et al. (2005) described this as institutional stigma, referring to the rules, policies, and procedures that are put in place by persons invested with social authority, who in turn restrict the rights and opportunities of other more disadvantaged persons. This institutional stigma is reflected in the delivery of MMT policies and procedures including drug testing, supervised methadone administration, and contracts (Harris & McElrath, 2012; Vigilant, 2004). Institutional stigma was reflected in this research study when participants described the procedure of urine drug screening and how they line up to submit samples, a time during which the participants perceived that confidentiality was not maintained. Participants expressed feelings of degradation and not

feeling comfortable with this procedure, in part because privacy was not maintained. Some participants voiced their opinions with having urine drug screening discontinued in some circumstances as their prescribing physician was aware of their substance use while on methadone and they found it redundant. Although this could be a safety concern, this is one example where the rules, policies, and procedures restrict the rights and opportunities of the people enrolled in MMT. In addition, institutional stigma was reflected in the participants' descriptions of feeling alienated by their communities when accessing pharmacies and clinics.

Participants expressed that communities were aware of MMT clinics and participants felt that communities perceived methadone users as “drug addicts” and “not normal,” in comparison to the idealized social norms of the employed, drug and alcohol-free, married, voting, and heterosexual persons (Stafford & Scott, 1986). Research indicated that the stigma associated with people being identified as ‘drug users’ is one barrier to MMT participation (Anstice et al., 2009). This label created a power imbalance resulting in the stigmatized person potentially feeling discriminated against and with the persons in positions of power controlling outcomes of consequence, such as access to methadone treatment and retention. The result is often that participants prematurely discontinue treatment and/or avoid accessing MMT.

The barriers noted above can be understood as hindering the first phase of Hardt and Negri's (2000) theoretical framework of inclusion, differentiation, and management (identified in Chapter Three). To have a program that reaches out to all people, barriers that cause conflict or hinder inclusion need to be addressed. Participants continued to perceive barriers to MMT clinics, for example, related to wait times and “time consuming” new patient intake forms. Literature has identified that an important factor in reducing mortality with opioid dependence is by providing rapid access to MMT (Clausen et al., 2008). It is known that persons who intravenously inject heroin who enter and stay in MMT can reduce their risk of mortality due to

the decrease in intravenous illicit drug use, HIV risk behaviour, and criminal activity (Hickman et al., 2003; Mattick & Degenhardt, 2003; Stenbacka et al., 1998). Participants identified that when they were turned away from MMT, as a result of wait times, they continued to use intravenous drugs until they were accepted into treatment. This highlights the importance of providing MMT that is inclusive and accessible, meaning no wait times for treatment initiation, and wherein the stigmatized atmosphere that is attached to MMT is minimized and mitigated as much as possible. As noted above, one way to help remove the stigmatized atmosphere, that is hindering access, is by changing the labels that currently create or foster stigmatization.

The second point in Hardt and Negri's (2000) sequence, following inclusion, is differentiation. Currently, however, the participants did not feel as though their MMT programs were specific (i.e., differentiated) to their requirements and unique life contexts, meaning that their distinct needs were not met. That is, participants felt as though they were not treated as unique individuals who required different resources and services to successfully use MMT. Currently, they felt there was only one plan of care for everyone enrolled in MMT, all who had to follow the same guidelines and policies. For example, all people who enrolled in MMT had to go to the pharmacy every day to receive their observed methadone administration until they met the same strict guidelines for take-home doses (as outlined in Chapter Two). This meant that certain people were only eligible for their first weekly take-home dose after two months in MMT (as explained in Chapter Two). Participants perceived this policy as discouraging MMT usage due to the fact that participants would try to work toward this goal, i.e., of obtaining carries, but then would relapse during this time, and consequently had to start over again.

In addition, some participants expressed having difficulty travelling to the pharmacy to receive their daily doses of methadone, and still carries were not given. This can potentially result in illicit drug use and early termination of treatment as participants described it as a great

deal of “responsibility” and wanting “something” more quickly. This highlights the importance of differentiation and the need to assess patients prior to initiating MMT. It is during this phase that their difficulty in accessing pharmacies and their needs for obtaining carries would be identified and discussed between the prescribing practitioner and the patient. With this differentiation the use of illicit drugs and early termination of treatment could be minimized. Moreover, this perception of a one-size-fits-all approach led the participants to describe their MMT services as a “chore” and “tedious.” Participants did not like having to plan their lives around going to the pharmacy every day to get methadone, when many felt the services could be better tailored to suit their needs. Incorporating the differentiation phase into MMT can allow for the process of identifying individual needs, and matching them to their identified resources and services, to occur, i.e., tailor MMT to meet individualized needs and unique life contexts.

Literature has identified the importance of providing services that address individualized needs, which in turn can improve MMT programs and service utilization (Wideman et al., 1997). Research has also identified that when MMT service delivery is based on individual treatment planning, in which patients’ needs are assessed and identified appropriately, patient satisfaction improves, and, as a result, so does retention in treatment (Deering et al., 2012; Jackson, 2002; Kelly et al., 2011; McHugh, 2012; Wideman et al., 1997; Villfranca et al., 2006). Retention in MMT has been identified as an important factor for achieving optimal clinical benefits (Simpson, Joe, & Broome, 1997). This highlights the importance of assessing patients on admission into the program. To determine patient specific needs and to create an individualized treatment plan, in which needs are assessed and identified appropriately, people who use MMT need to be assessed for a unique MMT plan, instead of being entered into a program that follows the same uniform policies and guidelines. Integrating Hard and Negri’s (2000) differentiation

phase can provide MMT with a process of organization to help the people, who are enrolled in MMT, to be treated as individuals where their differences are accepted and validated.

Other participants similarly complained about what Hardt and Negri's (2000) framework would call the management aspect of MMT, which would be the delivery of services. These issues, which have previously been identified (CPSO, 2011), related to the inconveniences of MMT, including frequent physician visits, daily-observed medication administration, limited pharmacy dispensaries, and weekly or bi-weekly urine samples; this was identified as possible negative effects of MMT. Isaac, Kalvik, Brands, & Janecek (2004) identified that these commitments involved in MMT can also hinder treatment participation and retention. In previous literature, program related factors influence early treatment termination (Reisinger et al., 2009). It was previously identified that the program rules of MMT can hinder one's ability to progress in life changes causing patients to leave treatment early (Reisinger et al., 2009).

According to the CPSO (2011), accelerated take-home doses can be given to patients who have regular work, full-time educational programs, or family commitments that restrict the individual from receiving their daily observed doses. The CPSO (2011) identified that participants may fall under this category if they are at a so-called "lower risk" for misuse of their take-home doses, meaning the patient is clinically stable, does not have a concurrent substance abuse, and has no concurrent active mental illness. However, the CPSO (2011) identified that only a minority of participants will "likely" be eligible for accelerated doses. Therefore, participants who do not fall under this category are "punished" by having to wait up to eight months to receive full take-home doses. As described above, multiple participants expressed that this was discouraging and challenging. This is of concern as the participants expressed that the waiting period to obtain "carries" is difficult because they end up relapsing during this time, and, as a result, discouraged them from making efforts to receive take-home doses. This presents the

idea that although the participants described a program that has a single management strategy, MMT in fact can implement strategies based on the findings from the differentiation phase of Hardt and Negri's (2000) theoretical framework where there is differentiation of patient needs based on individual requirements (i.e., accelerated take-home doses versus no take-home doses).

Another management issue raised in this study was that the pharmacy could be a trigger for relapse. Some participants reportedly found it difficult to be in a room where others were potentially using illicit substances or where illicit substances were being sold. The participants explained that some of the pharmacies were used as a meeting place to buy and sell drugs. This finding is consistent with prior research where, in concentrated MMT clinics, people can come into contact with other persons who continue to use alcohol, illicit opioids, or other substances (Anstice et al., 2009; Isaac et al., 2004; Vigilant, 2009). Pharmacies that dispense methadone (because they are limited in number and thus serve as focal points in MMT service delivery) can become places where people meet other persons on MMT and this can function as a trigger for illicit drug use (Vigilant, 2009). In this study, participants described this as an atmosphere they would rather avoid. Indeed, the participants used MMT to avoid illicit drug use. However, if, as described by the participants, when someone did not have carries, s/he did not have a choice, and had to go to the pharmacy daily for an observed dose of MMT. Therefore, the lack of differentiation within MMT led to a single management approach that deterred usage. For example, when you are enrolled in the program and have no carries you have no choice but to go to the pharmacy, even though the pharmacy functions as a trigger for relapse.

Moreover, multiple participants expressed the need for extended pharmacy hours. Due to restricted pharmacy hours (e.g., hours are decreased on holidays and weekends), the participants found it difficult to receive their methadone, which, in some cases, resulted in them missing their dose and using illicit substances to avoid withdrawal. Clearly, this affects retention in treatment.

Overwhelmingly, what emerged herein is was the participants' perception and experiences that current MMT service delivery program rules and policies did not promote an individualized treatment program. Indeed, the participants felt that every individual who initiates and enrolls in MMT follows the same rules and policies. This research indicated that participants continued to face multiple challenges in relation to meeting their needs. It is not without acknowledgement that the safety of prescribing methadone is highly important; methadone is a controlled substance, and, therefore, prescribing practitioners need to follow established guidelines (CPSO, 2011). Problematically, though, such standardization may hinder the implementation of individualized programs. D'Ippoliti et al. (1998) identified that with one-year retention of cases being less than half, the effectiveness of treatments offered would have been significantly improved by a change in their treatment strategies (D'Ippoliti et al., 1998). System characteristics of MMT, such as clear program philosophies, influence individual retention in treatment (D'Ippoliti et al., 1998; Maura et al. 1998). Keeping this in mind, prescribing practitioners need to acknowledge that every person is unique, thus requiring treatment strategies that differentiate the needs of each patient. Hopefully, differentiated MMT service delivery would improve satisfaction and increase MMT retention rates.

Regarding MMT, the importance of patient satisfaction cannot be understated. It is known that patient satisfaction is a common factor that has a great effect on retention in MMT (Deck & Carlson, 2005; Wideman et al., 1997). When service delivery is based on individual treatment planning, patient satisfaction increases (Deering et al., 2012; Jackson, 2002; Kelly et al., 2011; McHugh, 2012; Wideman et al., 1997; Villfranca et al., 2006). The CPSO (2011) noted the importance of creating a treatment plan that "tailors to the patients' treatment goals" and should review the rules of the program and expectations, such as take-home policies, frequency of physician appointments and urine drug screening, confidentiality, and general consent (CPSO,

2011; Isaac et al., 2004). However, the participants identified that, in contrast to these guidelines, they felt treatment plans were not tailored. For example, participants stated that how participants earned carries should be on an individual basis not a single process. The individual characteristics and needs of methadone patients are unique and differentiate within and among clinics. If the treatment plans were tailored to their specified needs this could increase patient satisfaction, as noted above. Therefore, creating MMT programs that address patients individualized needs will improve MMT programs and service utilization (Wideman et al., 1997), by increasing retention in treatment and decreasing premature treatment termination.

Problematically, in MMT, there currently is no differentiation phase, the second phase of Hardt and Negri's (2000) "Triple Imperative of the Empire" where difference is examined and explored. Participants were reportedly assessed as to whether or not they met the suggested criteria for opioid dependence, and, if so, were enrolled into a single management program. Using Hardt and Negri's (2000) work, in relation to MMT, such non-adaptive management likely hinders inclusion. If MMT does not provide an inclusive environment for all people, then the program may not reach everyone who could benefit from such services. After inclusion MMT skips to the management phase, which includes the rules and policies of the program; e.g., providing urine samples, obtaining observed doses, and potentially working toward take-home doses. As noted in Hardt and Negri's (2000) writings, for any program to be successful, its internal aspects – or what Hardt and Negri (2000) called the three phases of inclusion, differentiation, and management – need to synergistically interact and should not undermine one another. MMT as it stands is missing an internal aspect to its program, differentiation, making it difficult for the program to be successful, as identified through the participant's perceptions.

However, if MMT were to be restructured using Hardt and Negri's (2000) work, first, there would need to be development within MMT to provide an all-inclusive program; i.e., one

that does not deter treatment initiation and create or foster stigmatization. Of importance, providing a healthcare service that is more inclusive, again, does not mean creating more MMT clinics and pharmacies; it is, however, the act of attempting to ensure that all three phases interact together. Furthermore, if MMT were not to provide healthcare services that create an “all are welcome” atmosphere and is “blind to difference” (Hardt & Negri, 2000, p. 198), it will not likely maximize the proportion of people who could benefit from MMT, as people interested will continue to either a) not seek treatment or b) prematurely discontinue treatment.

Second, it needs to provide a tailored service safely allowing the “consumers” of MMT to have individualized and conceptualized treatment, and this occurs because there is no single care plan that works for all people. Currently, the participants either meet the criteria for MMT or they do not. If participants meet the criteria for MMT (in Chapter Two), they are placed in a one-size-fits all model. This differentiation phase highlights the importance of assessment that would allow for the identification for the “type” of MMT treatment, which could be beneficial for each individual. This could increase satisfaction with MMT, improve retention in treatment, and decrease the chances of relapse. Lastly, the patients of MMT need to be managed accordingly. Currently, the participants identify a single management program; however, as noted above, it does not have to be this way with the implementation of a differentiation phase into the program.

In conclusion, the common theme from this research is that multiple barriers continue to hinder MMT access and retention. Background literature indicated that people might experience disadvantages including discrimination, negative influences from other patients, feelings of degradation, and inconveniences from the program policies, such as frequent physician appointments and observed methadone administration (Isaac et al., 2004). This research study has shown that the patients continue to experience disadvantages while enrolled in MMT. This research identifies that if MMT continues to follow the same program guidelines, there will

continue to be issues with enrolment and retention rates, and no further development will be made to provide a more inclusive healthcare service.

Discussion Point 2: Stigmatization and MMT

As discussed above, the participants interviewed for this research reported experiencing multiple forms of stigmatization. Each described their experience with stigmatization in different ways and employed multiple descriptors when recounting their experience. First, participants identified experiencing stigma with healthcare providers (either as personal experiences of stigmatization or experiences they heard from others), which resulted in participants not seeking healthcare in some cases. Participants described patient-healthcare provider interactions in which they were treated like “drug seekers” and “drug addicts,” or when they felt their needs were “dismissed” as a result of being labelled a “drug addict.” As a result, some people on MMT reported avoiding healthcare. Earnshaw et al. (2013) identified similar findings regarding MMT and participants experiencing stigma. Earnshaw et al. (2013) identified that persons using MMT experience prejudice, discrimination, and stereotypes from family and friends, healthcare workers, co-workers and employers. Thirty percent of individuals reported experiencing stigma from family and friends and healthcare workers with an increase in experience of stereotyping and discrimination, 41.9 to 50.5%, respectively (Earnshaw et al., 2013).

Participants also described being reluctant to seek healthcare due to stigmatization. Previous research has explored such stigmatization while enrolled in MMT. Conner and Rosen (2008) identified that participants in MMT experienced stigma from multiple sources regarding drug addiction (e.g., family, friends, healthcare workers). This caused participants in Conner and Rosen’s (2008) study to conceal their MMT and be apprehensive to seek treatment.

Fear of stigma was also found in this research in relation to nondisclosure and fear of seeking support services. Participants identified fear of disclosing their methadone use as a result

of feeling viewed and judged by others. This, in turn, can also be an interpretation of stigma. Participants felt they were perceived differently as a result of MMT use, looked at as a “drug addict junkie,” and felt “judged” by others. The participants also perceived they were viewed as dependent on a substance to function, which contributed to their beliefs that MMT was less than the socially idealized state of complete abstinence – a find that has previously been identified (Isaac et al., 2004; Joseph et al., 2000; RNAO, 2009). As well, participants recounted feelings of “shame” when discussing MMT use due to chemical dependency and not being able to function independently, as well as a result of relapse from abstinence based programs and then reaching out to MMT. The result was that participants did not want to continue MMT. From the beginning of MMT programs, it has been a stigmatized intervention due to the belief that it substitutes one drug of addiction for another (Joseph et al., 2000; RNAO, 2009). Isaac et al., (2004) and Vigilant (2004) also identified that the rules and policies of MMT can bring on feelings of degradation and shame, including the requirements for observed dosing and urine drug screening. Vigilant (2004) highlighted that stigma cannot be avoided in MMT as observed methadone dosing brings people into the public, at pharmacies or clinics, and often privacy cannot be assured. This research thus identified that stigmatization of MMT continues, which continues to hinder access to care.

Participants also internalized stigma and experienced stigma as a feeling. Participants identified self-stigma by describing themselves as “not normal” and as “junkies.” This identified that self-stigma results in participants not wanting to continue with MMT. Goffman (1963) described stigma as individual traits that differentiate people from what society deems as “normal,” and therefore, are separated from social categories. The feelings that the participants expressed in relation to MMT, including feeling like a “junkie” and “not normal,” were experienced from a variety of acts of discrimination, thus reducing the individual’s life chances,

causing them to withdraw from society. Participants also experienced social isolation/exclusion and marginalization. MMT use prevented participants from accessing NA or AA support services as a result of feeling stigmatized because they were not being “abstinent.”

Consistent with previous research, methadone patients did not feel “credited” for clean time because they used methadone. As a result, participants did not feel safe attending support services, due to the fear that they will be faced with being judged that they are “not clean” (Vigilant, 2004). Vigilant (2004) concluded that this can lead to social exclusion by avoiding NA/AA fellowships, patients are not in a position to meet other individuals who are in recovery and at the same have removed themselves from their previous lifestyle of injection drug use.

Many participants did not have other support systems, and few had relationships with family and friends. This can be understood as both a contribution of exclusion and withdrawal from others. Whether these perceptions related to instances of intentional or even associated stigma or judgement, however, is irrelevant; the point is that the outcome is isolation. This experience of stigma that the participants identified affects treatment-seeking behaviour, and created barriers to treatment access, retention, and success within MMT (Vigilant, 2004).

Of note, in this research, stigma was identified as two-part: external and internal. External stigma or “enacted stigma” was perceptions, feelings, and actions made towards MMT participants. Participants have experienced such stigma through interactions with healthcare providers as well as from their communities. Social stigma exists regarding MMT and society believes that MMT is “bad” and bias against MMT has been maintained. Participants were aware of this perception of MMT and the idea that addiction treatment should be “drug free.”

In some cases, participants also experienced internal stigma, which occurred when people felt they were judged and then cognitively or emotionally absorbed the stigmatizing assumptions and believed and applied it to themselves, thus experiencing self-hatred and shame (Corrigan,

Kerr, et al., 2005). This was noted in the research when participants described “drug addicts” as “scum,” “thieves,” etc., thus causing isolation and resilience to accessing healthcare. Participants then propagated and promoted this internalized stigma through describing themselves and others as “drug addicts” and “junkies,” further normalizing the discrimination and stigma being experienced. This was noted multiple times throughout the data. When Tyrell described people using injection drugs as a “plague,” he normalized, maintained, and propagated the stigma that is experienced by persons using MMT. This internalized stigmatization also appeared to cause some people to isolate themselves from family, friends, and healthcare services, resulting in a vicious spiral of further isolation and exclusion that corresponded with the participants feeling increasingly stressed. The end result was an increased likelihood of injection drug use.

Based on such findings, an important point to discuss is that whether stigmatization occurs or not is actually quite irrelevant. Stigma is an experience, feeling, or perception. It is the perception of stigma that creates reality, and affects (impedes) healthcare service uptake and usage. Therefore, being “non-stigmatizing” is not something that can be judged by a healthcare professional per se, but rather, is established by patients, and, as just noted, is one aspect that can hinder the inclusion phase of MMT services. For example, participants criticized MMT and expressed that currently MMT is not providing a healthcare service that respects confidentiality. Participants expressed that changing the way MMT is “packaged” could allow for confidential care and reduce the stigmatization related to MMT. Therefore, providing MMT services that respect peoples’ perceptions of stigmatization can create a more inclusive environment and help develop a program that mitigates stigma. Most importantly, inclusion does not mean making MMT more available by providing more services; rather it is providing MMT that is differently delivered, which can allow MMT to be accessible for people who would benefit from such care.

In conclusion, this research study confirmed that stigmatization continues in MMT as a repetitive cycle. Participants perceived stigma in relation to MMT and did not want to either a) enrol in MMT or b) return for treatment, both which increase mortality/morbidity. Thus, there are issues of inclusion (stigma, as above), and management (single care plan, limited access, etc.).

Discussion Point 3: Healthcare as a Control

Lastly, in this research, it was identified that healthcare providers do more than just provide healthcare. In this study socialization and maintenance of socially accepted behaviour occurred through MMT. Paternalistic relationships were described as being present between the prescribing MMT practitioners and patients. For example, “carries” (take-home doses) were described as control mechanisms for so-called good (or compliant) behaviour, thus creating a paternalistic relationship between prescriber and patient. If people enrolled in MMT follow the rules and policies (i.e., they provide clean urine drug screen testing, and work and/or attend school), they became eligible to receive carries, therefore, decreasing the number of times they had to undergo observed methadone administration. Some participants saw this as a positive aspect of MMT (as it created an incentive for good behaviour and something to work toward), whereas others described this experience negatively. If they do not behave according to the established rules, there were consequences and penalties, e.g., take-home doses are taken away. These findings were consistent with the extant literature: MMT offers the idea of recovery as well as this higher power that detects sobriety as a form of “punishment-treatment-punishment” cycle (Vigilant, 2004, p.416).

Hardt and Negri (2000) described an “Empire” where power is everywhere and certain groups control others. As identified in this study, such a process currently occurs in healthcare. To achieve healthcare goals in MMT, e.g., to decrease opioid use, criminal activity, morbidity, and pre-mature mortality related to disease, HIV and Hepatitis C (HCV), trauma, and death from

overdose and suicide (WHO, 2004; WHO, 2009; Popova et al., 2006), there lies a control within the program to ensure that people enrolled in MMT function in a certain order to achieve these goals. For example, MMT programs offer a medication that decreases the “want” of opioids, in hopes to decrease opioid use, while at the same time decrease criminal behaviour. Furthermore, if the people enrolled in MMT follow the rules and policies they are then “trusted” and become an eligible member to receive carries. MMT controls the participants by giving them what they want, through opioid-substitution therapy, but also holds control over something that is valuable to them, i.e., take-home doses, to ensure that they become compliant ‘productive elements’ of society.

Take-home doses were strongly valued by participants, and research has indicated that retention rates are lower with restrictive take-home policies (Amass et al., 1996; Pani et al., 1996). Participants identified in this study that when they received carries it made them feel “good” and “trusted” and although working towards carries is challenging, when they receive carries it is very rewarding. The CPSO (2011) methadone administration guidelines for take-home doses states that for an individual to receive a take-home dose, s/he must be on MMT for two months and meet the criteria of clinical stability and have no problematic substance use. When these criteria are met, an individual can be given one take-home dose (out of a seven day week), and subsequent take-home doses are given every four weeks.

In addition, the CPSO (2011) documents note that a slip, or relapse, in MMT does not mean that take-home doses should be reduced or stripped from the individual involved. The guidelines of MMT administration outline that a single episode of drug use does not mean or require a reduction in take-home doses, unless the patient shows other signs of clinical instability (CPSO, 2011). However, take-home doses should be reduced during a continued relapse (CPSO,

2011). The participants in this study, however, perceived a one-time relapse resulted in their carries being outright and totally removed.

Relapses are not considered a component of MMT therapy and if responsibility is not demonstrated then the people enrolled are “punished,” with the prescribers taking away their take-home doses. These situations were described as being very frustrating for the participants involved. Participants expressed that when this occurred they felt that their prescribing practitioners were taking away something that they had worked hard at accomplishing. One participant described her relapse and how she lost her carries and expressed that if she was to get back on the “right track” her prescribing practitioner would work with her and give her back her carries. This highlights the power relationship between patients and their healthcare providers. With that being said, MMT healthcare providers function as moral authorities and service regulators who reward so-called responsible behaviour. The prescribing practitioners enforce “appropriate behaviour” through a position of power, for example, do not disappoint, and being able to punish and reward with more or fewer carries

MMT is also attached to the idea that healthcare is a responsibility. Participants identified that before enrolling in MMT their only commitment was to their drug use. When an individual commits to MMT there is a list of responsibilities that are forced on them, including frequent visits to the prescribing physician, urine drug screening, daily observed dosing, etc (CPSO, 2011; Isaac et al., 2004). These are multiple inconveniences that have been previously identified; These inconveniences can cause patients to have feelings of “losing control” over their life and feeling restricted and controlled by the rules and policies of the methadone program (Reisinger et al., 2009). This has been described as an exertion of control over ones life that is similar to being addicted to heroin (Reisinger et al., 2009; Vigilant, 2004). In the end, this creates duties and responsibilities for participants to follow, as a result setting them up for failure. The

responsibility that is attached to MMT also forces people to “re-join” society, making it difficult for them to commit to MMT. The CPSO (2011) defines this “responsibility” as clinical stability; however, the participants described the issue relating to responsibility, not clinical stability.

Limitations

Several limitations in this study should be noted. First, sampling bias exists in this research study. All participants recruited had homogeneous characteristics, meaning all participants had to be enrolled in MMT for greater than six weeks. However, all participants recruited were participants who were using or have used illicit substances and/or injection drug use. The results of this study could have varied if participants were also on MMT for pain management. Second, participants were given an honorarium for participating in this research study. This raises concerns of focus on the enrolment of vulnerable populations as participants may have participated in the study for financial purposes only.

Recommendations

Several recommendations and future directions emerged from this research study. The following is a series of recommendations for research, education, clinical practice, and administration.

Research. First, this research study was done with a small sample size and participants were recruited from two different methadone clinics in Ottawa (although most participants had previous experience with other clinics). To increase transferability of this research, further research is required with more participants from different settings including, multiple clinics and cities, to confirm the findings from this study. Moreover, research is needed to understand the idea that stigma is a perception. Methadone delivery consists of prescribing practitioners, pharmacists, and nurses in primary and tertiary care, and understanding their perception of people enrolled in MMT is required to further understand stigma in relation to MMT delivery.

Lastly, research is required on how to safely create more individualized MMT plans. This is an important role for nurses to understand as nurses are in direct contact with patients in multiple clinical areas and can assess their patients to help create such plans for MMT.

Education. Disseminating the results of this research study is important. Educating undergraduate nursing students, or nurses who will come into contact with people enrolled in MMT (e.g., community health centres, emergency departments) is important to bring awareness that stigma is a perception people experience. Nurses are often the first contact for people seeking healthcare (Go et al., 2011) and educating them on the dynamic relationship people experience with stigma can allow the nurses to have a vulnerable impact on their lives with the identification, intervention, and treatment of patients with substance abuse (Sullivan, 1995).

The participants identified multiple sources of stigmatization. It is important to teach nurses in their undergraduate degree the impact that stigmatization can have on healthcare seeking and retention in treatment so that they can reflect on their actions and assumption for it to not affect healthcare. As the nurses role is evolving and the nurse practitioners scope of practice is broadening, nurse practitioners may soon be able to play a key role in the delivery of MMT services, therefore, integrating the findings from this research into the nursing curriculum is important for successful delivery of services that provides stigma free healthcare delivery.

Clinical Practice. It is important that nurses be aware of how clinical milieu can affect healthcare seeking and retention in treatment. Participants identified negative perceptions of MMT prior to initiating treatment and they felt a fear of stigmatization due to the fact that MMT is not “abstinent.” As a result, this caused participants to a) not want to initiate treatment and b) not use MMT for long-term use. In clinical practice, participants should not enter an atmosphere expecting to be stigmatized. Unfortunately, MMT is viewed negatively because it is less than the

socially idealized state of abstinence (Isaac et al., 2004). Of importance, practitioners need to be conscious of the presence of stigma, in relation to MMT, and reflect on it in their daily practice.

In addition, participants described how they felt uncomfortable in certain settings because they like to maintain anonymity about their drug use. MMT clinics, however, are labeled for example “opioid addiction,” thus not allowing participants to enter a space that allows for confidential services. Participants also described the atmosphere of the pharmacies to be a place where people “buy and sell drugs,” in turn, making them a trigger for relapse. Overall, clinicians need to be aware of the environment in which they are providing MMT, as they might be perceived as stigmatizing and unsafe among members of this population.

Nurses can play a role in this area to help assess the persons enrolled in methadone and their personal perceptions of the clinic they attend to foster an atmosphere that is free of stigma. Nurses are patient advocates; therefore, advocating for an inclusive and safe environment can help increase adherence in MMT. In addition, as nurses are frontline healthcare workers, they can help identify their patient’s personal characteristics and the needs of people enrolled in methadone, as a result increasing personal satisfaction, therefore increasing MMT adherence. Hopefully, this research can help in the clinical setting and the clinicians can work towards creating an environment that is stigma free, one that allows patients to feel safe and comfortable.

Administration. Overall, the participants expressed positive aspects of MMT itself. Participants described methadone as a positive aspect in their lives; it helped them have positive self-perceptions, gave them an opportunity to feel safe with methadone use, and assisted them to avoid criminal activity. In addition, MMT delivery helped decrease injection drug use and illicit drug use related to the therapeutic effects of MMT (i.e., blocked reception of other drugs and its effectiveness with opioid withdrawal). With that being said, MMT helped in their recovery with opioid substance abuse. However, the participants also attached many negative attributes to

MMT use. Participants expressed that they felt shame with MMT use as they continued to feel like a “drug user” and that they could not handle life without drugs. Participants also described many negative attributes of the pharmacies where methadone was dispensed. These findings suggested that, although MMT delivery helps with their recovery of opioid substance abuse, it continues to have multiple barriers that affect access and utilization of treatment.

The findings that emerged from this study can inform MMT administration. It is important to address the “ones-size fits all approach” that MMT currently follows. This can be accomplished through the dissemination of this research study in clinical practice. Becoming aware of how MMT rules and policies can affect treatment initiation and retention can help change MMT delivery. The integration of Hardt and Negri’s (2000) theoretical framework can help the administrative process of MMT to develop an inclusive environment that omits stigmatization and differences. With this integration, the creation of an inclusive environment that allows for individualized treatment plans, can, hopefully, increase patient satisfaction within their clinics and decrease early treatment termination and illicit substance abuse.

Chapter 7-Conclusion

Herein, the perceptions and experiences of persons enrolled in MMT were explored. By exploring their experiences and perceptions about MMT, through a critical theory perspective, this research identified that MMT can have both a positive and negative impact; however, it is the negative influences (attributes, self-perceptions, stigma) that affect MMT initiation and delivery.

Of importance, it was identified that participants experience multiple sources of stigmatization prior to the initiation of MMT, as well as when enrolled in MMT. This causes a seemingly contradictory relationship between the participants, stigma, and MMT, as a result, can affect healthcare delivery. Participants do not want to use MMT as a result of stigma; however, they also do not want to again engage in injection drug use. Furthermore, it was identified that participants experience of external and internal stigmatization was an experience, feeling, or perception. It is this perception of stigma that affects MMT healthcare service and utilization.

Unsurprisingly, the results presented herein have mostly been previously identified. Despite the similarity to previous studies, access to MMT continues to need improvement. Two barriers that were highlighted in the data include 1) program rules and policies, and 2) stigma. Altering the rules and policies to create an individualized program and providing a non-judgemental atmosphere would likely help engage persons in treatment programs.

According to the work of Hardt and Negri (2000) (described in Chapter Two), effective services are needed (i.e., these that can differentiate and appropriately manage varying needs), and barriers that hinder inclusion (access and utilization of treatment services) need to be removed. If patients were viewed as consumers, then the program should include MMT initiation that is tailored to patients' needs, including minimal (ideally no) wait time for MMT initiation.

In summary, the important findings of this thesis are:

1. Participants reported positive aspects to MMT. MMT helped them in their recovery with opioid addiction, decreased criminal activity, and gave them positive-self perceptions. (Theme-One)
2. MMT is attached with negative-self perceptions that repeatedly affected MMT initiation and usage. (Theme-One)
3. Participants experienced stigma in relation to MMT including, self-stigma, chemical dependency, and fear of stigmatization. (Theme-Two)
4. The place of stigma. It was identified that methadone delivery promotes a stigmatizing atmosphere, in clinics and pharmacies. (Theme-Two)
5. Participants' experienced marginalization and social exclusion while enrolled in MMT. (Theme-Two)
6. MMT is viewed as a responsibility where the prescribing practitioners use MMT as a social control for "good" behaviour. (Theme-Three)
7. A connection was made between healthcare and the enforcement of responsibility, as well as, a power imbalance between patients and prescribing practitioners. (Theme-Three)

Overall, this descriptive research study identified that MMT is a positive aspect to the participants' life; however, all participants wished to discontinue MMT and not remain in treatment. There is an abundant amount of literature to support MMT and its effectiveness in the treatment of opioid addiction; however, little research has addressed the perspectives of MMT from the people enrolled in the program. Although MMT provides a healthcare service that has positive intentions, if the program continues as is, it will not decrease the barriers that hinder treatment initiation or increase retention rates, and thus will not achieve a maximal impact. Taken as a whole, the results presented above can be used to overcome such a shortcoming.

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Appendix A: **MMT and the Pharmacokinetics of Methadone**

Review of MMT

For people who have an opioid addiction, methadone maintenance treatment [MMT] is a substitution therapy that allows people to return to their regular physiological, psychological, and societal functioning (CPSO, 2011). MMT is an effective treatment option for people who are opioid dependent to prescription opioids and and/or heroin (Isaac et al., 2004). In Ontario, the CPSO (2011) regulates methadone and its administration and prescription, and ensures the quality and accessibility of MMT. Physicians who wish to prescribe methadone must complete two opioid dependence treatment courses, after which they can then prescribe MMT in a multitude of settings including primary care, MMT-focused practices, community-based agencies, hospitals, chemical withdrawal units, residential treatment centers, and correctional facilities (CPSO, 2011). MMT is highly regulated and controlled; therefore, people need to meet the criteria of opioid dependency according to the APA (2013), as well as, the suggested criteria according to the CPSO (2011) to be considered for MMT in Ontario (CPSO, 2011; WHO, 2004).

These additional criteria include the following factors: a urine drug screen that is positive for opiates along with a verified patient's drug history; other treatment methods have been discussed with the person, a decision, between the persons and physician, has been made that MMT is the most appropriate treatment, there is lower likelihood that abstinence treatment would be successful, and an agreement to the terms and conditions of the MMT program by the patient (CPSO, 2011). However, the urine drug screening may not identify the specific opioid that the individual has reported taking; in that case a patient may be initiated on MMT if the patient has signs and symptoms of opioid withdrawal, obvious track marks, previous MMT use, or the physician has information from a previous prescriber (CPSO, 2011). Although MMT is an

effective treatment option for people who meet the suggested CPSO criteria, the CPSO (2011) continues to educate that abstinence-based treatment is also an appropriate treatment option, and should therefore be considered before MMT treatment initiation. Methadone is dispensed in pharmacies and taken once daily, usually at the same time every day. It is prepared in individual doses and ingested orally with observation either by a pharmacist or another trained healthcare profession (Isaac et al., 2004). When a patient is stabilized, take-home doses may be prescribed on an individual basis depending on time in treatment, stability, and ability to store methadone doses safely (Isaac et al., 2004). However, in Ontario CPSO (2011) regulations indicate that take-home doses cannot be prescribed until two months after treatment initiation.

Methadone treatment dosing criteria involves three phases: Initiation, stabilization, and maintenance (CPSO, 2011). Dosing criteria in the initiation phase is based on individual dosing (CPSO, 2011). In the initiation phase of methadone treatment, doses are prescribed based on the patient's underlining characteristics and their risk for toxicity, and are usually started at low levels, i.e., between 10-30mg/day, and increased slowly over time (CPSO, 2011; Selby & Kahan, 2011). Dosing criteria in the stabilization phase is considered the first two weeks of methadone. Patients should be on the same dose for three consecutive days for dose increases to occur, and based on their risk of toxicity, dose increases will vary between five to ten milligrams every three to five days or more; however, if there is a missed dose an increase can not be made as per CPSO (2011) regulations and for patient safety. Dose increases are similar to the early stabilization until a dose of 80mg/day is reached, and should be made solely when assessed by a physician. Furthermore, people during this phase should be assessed once weekly by the physician and doses increments should remain between 5 to 15mg/day everything three to five days (CPSO, 2011; Selby & Kahan, 2011).

Lastly, The maintenance phase of methadone is usually reached at five-to-six weeks (Selby & Kahan, 2011). At this time, an individual should have reached a methadone dose of 50-80mg/day depending on their dose increases (Selby & Kahan, 2011). In addition, people during this phase usually have reduced opioid use, tolerate methadone, and experience minimal to no withdrawal symptoms (Selby & Kahan, 2011). The optimal methadone dose that is used during this maintenance phase should relieve symptoms of withdrawal and opioid cravings for twenty-four hours, and this will be achieved without causing sedation and other side effects (CPSO, 2011; Selby & Kahan, 2011). If an individual continues to have signs and symptoms of withdrawal, then they are not on an optimal methadone dose. In this case, dose increments are increased by 5 to 10mg every five days to two weeks. Once a patient has reached a stabilized dose, they should continue to meet with their physician every one to two weeks during the first six to twelve months of stabilization, if the individual is functionally capable of doing so.

Pharmacology of Methadone

Methadone is a mixture of two stereoisomers, L-methadone, the active isomer, and d-methadone. With analgesic properties similar to morphine, it is an orally effective mu-opioid receptor opioid agonist that works by attaching to the opioid receptors in the brain by blocking the effects of other opioid agents, such as heroin (Ferrari, Coccia, Bertolini, & Sternieri, 2004; Joseph et al., 2000; CPSO, 2011; Leavitt, 2003; Selby & Kahan, 2011). It is important to have an understanding of the pharmacokinetics and pharmacodynamics of methadone in the administration to ensure an optimal dosage regime because methadone can be lethal when taken inappropriately, due to the potential of respiratory suppression when given in doses that exceed an individual's drug tolerance (Bart, 2012; CPSO, 2011). Methadone is available both in oral and injection forms; however, only oral use has been approved in Canada for the treatment of opioid dependence (Selby & Kahan, 2011).

	Methadone
Absorption	Absorbed in the small intestine and is “protein-bound to alpha glycoprotein (Selby & Kahan, 2011, p. 31). Detected in the plasma about 30minutes after administration with peak plasma concentrations occurring between 2.5 to 4 hours (Ferrarie et al., 2004; Lugo et al., 2005). Pharmacokinetics vary from person to person, which occurs due to the variability of the bioavailability (Ferrarie et al., 2004).
Bioavailability	Oral administration can be affected by several metabolic factors, including physicochemical properties of the drug, gastric motility, gut perfusion, and gastric pH (Lugo et al., 2005). As a result, the administration of the same dose can cause different blood concentrations in different individuals (Ferrarie et al., 2004). Drug absorption of methadone is approximately 90%, and it takes five to seven days for plasma levels to reach a steady state (Isaac et al., 2004). Accordingly, to avoid toxicity, a low dose administration is necessary during the induction phase of treatment because methadone accumulates slowly and increases gradually with each dose (Isaac et al., 2004).
Metabolism	Methadone is metabolized exclusively by the liver through demethylation and glucuronidation, and is metabolized through the cytochrome P450 system, mainly by CYP3A4 (Isaac et al., 2004). CYP3A4 is subject to the induction and inhibition effects of other drugs, and can be expected to have an interaction with methadone (Isaac et al., 2004). To explain, methadone,

	combined with similar drugs that have a similar pharmacological makeup can result in additive adverse effects such as, central nervous system [CNS] depression (CPSO, 2011; Isaac et al., 2004). This is due to the slow tolerance development of opioid effects; therefore, combining methadone with other CNS depressants increases the chances of respiratory depression and sedation, resulting in serious adverse effects that can be fatal (Isaac et al., 2004). As tolerance develops adverse interactions may be less prominent (Isaac et al., 2004). For mothers on methadone, methadone crosses the placenta barrier and can be excreted in breast milk; however, many mothers on methadone can continue to breastfeed (Isaac et al., 2004).
Excretion	Methadone is excreted in the urine and feces with the kidneys accounting for 15-16%, and the feces accounting for 24-40% (Ferrarie et al., 2004; Isaac et al., 2004; Lugo, Satterfield, & Kern, 2005). 25% of the elimination occurs within the first 24 hours and 52% during the first 96 hours (Ferrarie et al., 2004). The elimination half-life of methadone averages 35 hours (Isaac et al., 2004). It is long acting, permitting once-daily dosing. For the treatment of opioid dependence, which can suppress the symptoms of opioid withdrawal and eliminate drug cravings without causing euphoria for 24 to 36 hours (Isaac et al., 2004; Jamieson, 2002). This enables patients to function without causing impairment to their thinking and/or behaviour and allows them to experience regular pain and emotional responses (Jamieson, 2002). To explain, due to methadone's slow onset and long duration of action, compared to heroin with its fast onset and short active properties, it

	“helps normalize a patients physical and psychological functioning throughout the day by alleviating the cycles of intoxication and withdrawal that are experienced with individuals who use heroin” (Isaac et al., 2004, p. 20).
Adverse Effects	Methadone is a safe medication for long-term use, and there have been no signs of long-term organ toxicity; however, adverse effects and drug interactions can occur (Eap, Buclin, & Baumann, 2002; Selby & Kahan, 2011). One severe methadone adverse effects would include toxicity resulting in respiratory depression, particularly in methadone treatment initiation (Eap et al., 2002). Several common adverse effects include sweating, constipation, changes in sexual desire and function, and insomnia (Isaac et al., 2004; Cicero et al., 1975 ; Selby & Kahan, 2011; Yaffe, Strelinger, & Parwatikar, 1973; Al-Adwani & Basu, 2004).
Drug Interactions	Drug-to-drug interactions may occur. It is important to know how other substances interact with the CYP450 metabolism system because it can directly affect the level of methadone (CPSO, 2011; Lugo et al., 2005; Selby & Kahan, 2011). For example, having other substances that interact with CYP450 can cause excessively high drug levels or lower than expected drug levels thus, interrupting the therapeutic dose of methadone. As a result, the interaction can cause toxicity and overdose or cause a decrease in methadone effects and withdrawal symptoms (CPSO, 2011). Examples of one such drug are antiretroviral agents, which can decrease methadone levels, therefore, causing withdrawal symptoms (Lugo et al., 2005). Drug-to-drug interactions can have additive effects that increase the risk of toxicity on initiation, and risks for CNS depression during

	treatment include medications that are CNS depressants and sedating medications. The prescribing physician should be aware of any medications that can cause similar side effects of methadone, including constipation, urinary retention, and the prolongation of QT interval (CPSO, 2011).
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Faculty of Health
Sciences

School of Nursing

Appendix B: **Information and Informed Consent**

PROJECT TITLE: Personal Perceptions and Experiences of Methadone Maintenance Treatment. A Qualitative Descriptive Research Study

PROJECT LEADS

Patrick O'Byrne, RN,
PhD
Associate Professor
School of Nursing
University of Ottawa
451 Smyth Road, 1480D
Ottawa, Ontario, K1H
8M5

Courtney Pearson, RN, BScN
School of Nursing
University of Ottawa
451 Smyth Road
Ottawa, Ontario, K1H 8M5

Invitation to Participate: You are invited to participate in the abovementioned research study conducted by student researcher Courtney Pearson RN, in the context of a Master's thesis, and Professor Patrick O'Byrne, RN, PhD is acting as supervisor.

PROJECT OBJECTIVES

1. To understand and explore the process associated with MMT from the perspectives of persons who are ≥ 6 weeks post MMT initiation?
2. To understand and explore the experiences associated with MMT from the perspectives of persons who are ≥ 6 weeks post MMT initiation?

CONTRIBUTION OF PARTICIPANTS AND PARTICIPATION

Should you accept to participate in this research, you need to allocate the time needed to complete a 60 to 90 minute interview in order to answer the required questions. The interview will be audio-recorded. Only one interview will be necessary. You are under no obligation to participate in the study. You can chose to withdraw from the study and/or refuse to answer any questions during the interview, at any point in time. Whether you chose to participate/not participate/or withdraw from the study your access to health services will not be affected. If you chose to withdraw from the study, all information will be destroyed at that point in time.

RISKS ASSOCIATION WITH YOUR PARTICIPATION

613 562-5473
613 562-5443

451 Smyth
Ottawa ON K1H 8M5 Canada

www.uOttawa.ca

The researcher is aware of the intrusive nature of this study and that certain questions may evoke some distress or even suffering on your part. Therefore, the researcher is committed to referring participants to appropriate counselling resources, should you express this need.

Mental Health Helpline
1-866-531-2600
Drug and Alcohol Helpline
1-800-565-8603

Sandy Hill CHC
221 Nelson St.
Ottawa, Ontario
613-789-8941

CONFIDENTIALITY AND ANONYMITY

The confidentiality of information obtained will be respected for all participants taking part in this research. All participants will be attributed an alphanumerical code preventing any possibility of links between their real identity and their responses given.

CONSERVATION OF INFORMATION AND COMMUNICATION OF RESULTS

The information collected about me today will be kept in a locked file room at the University of Ottawa for 5 years. To ensure anonymity, all data will be identified by a code. The final stage of the research involves communicating the results in the form of scientific articles or conferences. By participating in this research, you accept that the results obtained from an analysis of your interview may be used for scientific or teaching purposes. The researcher will use a code to protect your identity.

COMPENSATION

As a way to compensate you for your participation, you will be given an honorarium of twenty-five dollars. If you wish to withdraw from the research study at any point, you will still receive the honorarium.

MAIN BENEFITS ANTICIPATED

By accepting to participate in this research you are promoting the advancement of knowledge in a domain that is poorly developed. You will gain no direct benefit from the study; however, participating in this study will allow you to have the chance to talk about your experiences in the methadone program and allow you to voice your needs and concerns. This research constitutes a novel response to a gap in knowledge that may allow a better understanding of your experiences and, ultimately, may help in the development of health interventions adapted to you.

VOLUNTARY PARTICIPATION

You are under no obligation to participate and if you choose to participate, you may withdraw from the research at any time. You may also refuse to answer questions. If you choose to withdraw, all data gathered until the time of withdrawal will not be used and will be destroyed. **Please note: Because no identifying information will be attached to the interviews, after you leave the interview, it will be impossible to have your interview material withdrawn.**

ADDITIONAL QUESTIONS OR COMMENTS

I understand the benefits and risks of my informed choices through a review of written material provided. Questions about this collection of information should be directed to the main researcher Courtney Pearson. If I have any questions regarding the ethical conduct of this study, I may contact the Protocol Officer for Ethics in Research, University of Ottawa, Tabaret Hall, 550 Cumberland Street, Room 154, Ottawa, ON K1N 6N5 Tel.: (613) 562-5387 Email: ethics@uottawa.ca

I give my consent to be: **Audio-recorded** ☐

I, PARTICIPANT __□__ [Participant #] AGREE TO BE INTERVIEWED AND CONSENT TO BE QUOTED ANONYMOUSLY.

I, PARTICIPANT __□__ [Participant #], AGREE TO BE INTERVIEWED, BUT DO NOT CONSENT TO BE QUOTED ANONYMOUSLY.

Researcher's Signature: _____

Date: _____

There are two copies of this consent form, and one of them is for me to keep.

Appendix C: Ethics Approval

File Number: H01-14-07

Date (mm/dd/yyyy): 02/12/2014



Université d'Ottawa
Bureau d'éthique et d'intégrité de la recherche

University of Ottawa
Office of Research Ethics and Integrity

Ethics Approval Notice

Health Sciences and Science REB

Principal Investigator / Supervisor / Co-investigator(s) / Student(s)

<u>First Name</u>	<u>Last Name</u>	<u>Affiliation</u>	<u>Role</u>
Patrick	O'Byrne	Health Sciences / Nursingy	Supervisor
Courtney	Pearson	Health Sciences / Nursingy	Student Researcher

File Number: H01-14-07

Type of Project: Master's Thesis

Title: Personal Perceptions and Experiences of Methadone Maintenance Treatment. A Qualitative Description Research Study

Approval Date (mm/dd/yyyy)	Expiry Date (mm/dd/yyyy)	Approval Type
02/12/2014	02/11/2015	Ia

(Ia: Approval, Ib: Approval for initial stage only)

Special Conditions / Comments:

N/A

File Number: H01-14-07

Date (mm/dd/yyyy): 02/12/2014



Université d'Ottawa
Bureau d'éthique et d'intégrité de la recherche

University of Ottawa
Office of Research Ethics and Integrity

This is to confirm that the University of Ottawa Research Ethics Board identified above, which operates in accordance with the Tri-Council Policy Statement and other applicable laws and regulations in Ontario, has examined and approved the application for ethical approval for the above named research project as of the Ethics Approval Date indicated for the period above and subject to the conditions listed the section above entitled "Special Conditions / Comments".

During the course of the study the protocol may not be modified without prior written approval from the REB except when necessary to remove participants from immediate endangerment or when the modification(s) pertain to only administrative or logistical components of the study (e.g. change of telephone number). Investigators must also promptly alert the REB of any changes which increase the risk to participant(s), any changes which considerably affect the conduct of the project, all unanticipated and harmful events that occur, and new information that may negatively affect the conduct of the project and safety of the participant(s). Modifications to the project, information/consent documentation, and/or recruitment documentation, should be submitted to this office for approval using the "Modification to research project" form available at: <http://www.research.uottawa.ca/ethics/forms.html>.

Please submit an annual status report to the Protocol Officer four weeks before the above-referenced expiry date to either close the file or request a renewal of ethics approval. This document can be found at: <http://www.research.uottawa.ca/ethics/forms.html>.

If you have any questions, please do not hesitate to contact the Ethics Office at extension 5387 or by e-mail at: ethics@uOttawa.ca.

Signature:

Riana Marcotte
Protocol Officer for Ethics in Research
For Daniel Lagarec, Chair of the Sciences and Health Sciences REB