

December 2013

The Experiences of Women Entering Methadone Treatment for Opioid Use: an Interpretive Phenomenological Inquiry

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THE EXPERIENCES OF WOMEN ENTERING METHADONE
TREATMENT FOR OPIOID USE:
AN INTERPRETIVE PHENOMENOLOGICAL INQUIRY

By

Melissa Rubio

A Dissertation Submitted in

Partial Fulfillment of the

Requirements for the Degree of

Doctor of Philosophy

In Nursing

at

The University of Wisconsin – Milwaukee

December 2013

ABSTRACT
THE EXPERIENCES OF WOMEN ENTERING METHADONE TREATMENT FOR
OPIOID USE: AN INTERPRETIVE PHENOMENOLOGICAL INQUIRY

By

Melissa Rubio

The University of Wisconsin – Milwaukee, 2013
Under the Supervision of Professor Kim Litwack

The United States is facing a momentous public health problem of prescription and illicit opioid use among women. Traditionally in health literature women have received less attention than men and this is especially true with regard to drug use. In terms of recovery from opioid use, treatment centers that use methadone as a pharmaceutical replacement for illicit opioids have been present in the US for decades, and women have been enrolling in treatment since its inception. However, there is little in the literature about the characteristics of these women, why they choose methadone treatment, and what their experiences are while in treatment. The study explores the experiences of thirteen women entering methadone treatment at a clinic in urban Fort Worth, Texas. Through the narrative descriptions of their history of drug use, reasons for deciding to get help, accounts of why they chose methadone and their experiences during their time in treatment are answered. An Interpretive Phenomenological qualitative research method was employed throughout to gather and understand the stories of women drug users searching for help. This method explores their beliefs about challenges, pitfalls and triumphs of recovery. Results from this study will add to the knowledge base about women and substance use disorders as well as women and change. Findings will help nurses and those in other disciplines to better understand the problem of opioid use among US women and assist women in traversing through the addiction journey.

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ACKNOWLEDGMENTS

First and foremost, I wish to extend my deepest gratitude to the members of my committee. Without your support and belief in me this work would not have been possible. A very special thank you is owed to Dr. Kim Litwack who has supported me since my Master's Degree with her expertise, knowledge and kind words. To Dr. Karen Morin, I owe my tenacity and perseverance in part to your belief in me and your support that I do indeed belong. Dr. Susan Rose and Dr. Tom LeBel, I will forever appreciate the important work you do with women and drug abuse and you helped to widen my perspective about this very important topic. And to Dr. Penninah Kako, your expertise in the qualitative methodology as well as your kindness and support has helped to guide me throughout this process.

To my family who may now understand what a tremendous undertaking this has been, I will forever owe my thanks to you for having the faith that I could do this. To my mother, who has always been supportive of whatever it was I chose to do. You will be receiving my student loan bills shortly.

To my best friend and biggest fan- my husband, Antonio. You have been so loving and understanding and have put up with a lot of time lost with me so that I could pursue this. I love you!

And last but certainly not least to the thirteen women who let me into their lives. I will remember you forever and hope that you will realize how important you are to me.

This is dedicated to you!

Chapter 1:

Introduction

Around the world, substance use disorders affect millions of people during some time in their life, and at last count the financial toll of such use had surpassed 400 billion dollars globally (United Nations, 2012). In the United States, substance abuse is an escalating problem. Even though the US population makes up just fewer than five percent of the world, population experts report that US citizens consume an estimated two-thirds of the world's illegal drugs, eighty percent of the world's supply of opioids and over ninety-eight percent of the hydrocodone in the world (Manchikanti, Fellows, Ailinani, & Pampati, 2010). Moreover, it is estimated that nearly twenty-five percent of US men and eighteen percent of US women will develop some kind of substance use disorder at some time in their lives (Rhee et al., 2003).

The latest version of the *American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (2013), known as the DSM-5, remains the gold standard for categorizing the names, symptoms, and diagnostic features of every recognized mental illness, including *substance use disorders*. This fifth edition was published in May 2013, nearly twenty years after the original publication of the previous edition, the DSM-IV, in 1994. The DSM-5 identifies ten separate classes of potentially problematic substances: alcohol, caffeine, cannabis (marijuana), hallucinogens such as phencyclidine (PCP), other hallucinogens such as LSD, inhalants, opioids, sedatives, hypnotics, anxiolytics (anti-anxiety medications), stimulants (including

amphetamine-type substances, cocaine, and other stimulants), tobacco, and other or “unknown substances”.

The DSM-5 suggests that an overpowering activation of the brain’s reward system is pivotal in explaining problems related to drug use. That is, the pleasurable feeling that people feel as a result of taking substances may be so profound that they neglect other normal activities (work, school, social activities, childcare, household responsibilities, and others) in favor of taking the drug. While the physiological actions of each class of drug differ, the activation of the reward system is similar across substances in producing feelings of pleasure or euphoria, which is often referred to as a “high.” (American Psychiatric Association, 2011).

Substance abuse disorders affected 23.9 million Americans in 2012 (*Results from the 2012 National Survey of Drug Use and Health: Summary of National Findings*, 2013). In order to track prevalence data on substance use across our country, the Department of Health and Human Services conducts routine large-scale studies to sample the population about alcohol and drug use. Every five to eight years the National Survey of Drug Use and Health (NSDUH) is distributed to randomly chosen households in each of the fifty states, including the District of Columbia. The target for each state is 900 participants, although larger states like Texas and California have set a much greater target of 3,600 participants. The study excludes institutionalized individuals and active duty military families, but results in a large, adequately representative sample of our nation’s general population. In addition to surveying the population about alcohol and tobacco use, the study explores the problem of past-month illicit drug use, including

problem opioid use, among the respondents. (*Results from the 2012 National Survey of Drug Use and Health: Summary of National Findings*, 2013)

According to the most recently conducted NSDUH in 2012, the United States saw an increase in the overall prevalence of all past-month illicit drug use from 19.6% in 2008 to 21.3% in 2012 among young adults ages eighteen to twenty-five. Among those over age twenty-six, 7 % of the respondents used illicit drugs in the month preceding the survey. According to the National Institute of Mental Health, Americans over age 18 affected by any mood disorder (major depression, dysthymic disorder and bipolar disorder) in 2012 was 9.5% (NAMI, 2013). Therefore, among the age demographic of 18-26 years, substance use disorders are the most prevalent mental health problem (Doweiko, 2009; NAMI, 2013).

Opioid use, in particular, is a growing drug problem in the US (Cavacuiti, 2011; Doweiko, 2009; Miller, 2006; Ritchie & Lewis, 2003; Strain & Stitzer, 2006). Illicit opioids include the illegal drug heroin and the nonmedical use of prescription pain relievers such as hydrocodone and Oxycontin®. According to the NSDUH, The number of past year heroin users increased from 2007 (373,000) to 2012 (669,000). Among persons aged 12 or older in 2011-2012 who used opioid pain relievers for nonmedical reasons in the past 12 months, 54% got the drug they used most recently from a friend or relative for free, and 10.9 % bought the drug from a friend or relative. An additional 19.7% reported that they got the drug through a prescription from one doctor. An annual average of 4.3 % got pain relievers from a drug dealer or other stranger, and less than 1% bought them on the Internet. (*Results from the 2012 National Survey of Drug Use and Health: Summary of National Findings*, 2013).

Although they are very effective for the treatment of acute and chronic pain syndromes, prescription opioids are associated with a high risk for abuse and diversion. The popularity of prescribing opioids for pain has increased in the past few decades. For example, from 1992 to 2002, prescriptions for oxycodone increased 380%. Researchers hypothesize that this increase may be related to the ease of availability compared to other drugs such as cocaine. In addition, it is thought that prescription opioids are more socially acceptable than other drugs and their purchase and possession are less strictly monitored (Blanco, Alderson, Ogburn, Grant, Nunez, et al., 2007).

When considering the characteristics of those who use opioids, the literature consistently confirms that the prevalence of opioid use is higher among men than women (D. A. Calsyn et al., 2010; Doweiko, 2009; United Nations, 2012). However, recent surveys have found that the gender gap between men and women who use substances is narrowing. For example, the male-to-female ratio of substance use disorders in the 1980's was estimated at 5:1, and data from the Office of National Drug Control Policy more recently report a ratio of 3:1 (Greenfield, Back, Lawson, & Brady, 2010). According to the NSDUH, girls ages twelve to seventeen had higher rates of prescription opioid use than boys in that age group, but men ages eighteen to twenty-five had higher rates than women (Greenfield et al., 2010). Women users may also experience personal circumstances very different to those of men. Researchers report that women who present with opioid use disorders have more problems with employment and more current and past medical problems than men (Back et al., 2011). Considering these facts, women have become an increasingly important sub-population of substance users to consider.

However contemporary studies specifically designed to learn about female substance users remain limited.

This information, as well as data published by the NSDUH and the Substance Abuse and Mental Health Services Association of the US federal government confirms that opioid abuse is a significant public health concern which demands attention as use continues to rise (SAMHSA, 2011). In addition to economic, psychosocial and legal consequences, serious medical complications of opioid abuse include skin infections, risk for transmission of HIV/AIDS and hepatitis, tuberculosis, respiratory failure, overdose and death (Apa-Hall, Schwartz-Bloom, & McConnell, 2008; Byrne, Lander, & Ferris, 2009; Cavacuiti, 2011; Manchikanti et al., 2010).

To address the problem of opioid use, treatment centers that use opioid replacement therapy are an effective option for users (Strain & Stitzer, 2006; Strang, 2002). In 2010, close to two million people were classified as needing treatment for opioid use. Despite these numbers, only 754,000 people were actually enrolled in treatment for prescription opioid use and 417,000 in treatment for heroin use during that year (SAMHSA, 2011).

Despite the existence of treatment options, there are also many intrinsic and extrinsic barriers to entering drug treatment that have been identified among users. Among men and women using opioids and surveyed from 2007 to 2010, 38.1% reported that they had no means to cover the cost of treatment, 30.3% were not ready to stop using, 9% believed that they could handle the problem without treatment, 8.4% had no means of transportation to and from the treatment centers, 7.9% believed that treatment may negatively impact their job, 7.1% reported that they might face negative opinions

from their community, and 6.5% believed that they did not need treatment. (SAMHSA, 2011).

Even though both men and women use opioid drugs, women may experience drug use and treatment differently than men (Greenfield, 2010). Although data are limited, the existing literature highlights that women who use drugs present with a very unique set of circumstances regarding their use. In a 1995 study, researchers found that women are more likely than men to belong to families where drug use is prevalent (Nelson-Zlupko, Kauffman, & Dore, 1995). Women often perceive their drug problem to have a genetic, environmental or stress component more than their male counterparts (Nelson-Zlupko et al., 1995). Substance-using women are also more prone to be in relationships with a drug-using partner; and many women relate their drug use to relationship stressors (Nelson-Zlupko et al., 1995).

Researchers find that women users in relationships, and especially those with children, may be less likely to enter formal treatment programs because of fear of rejection by their drug-using partners and other barriers such as lack of childcare and social stigma (Rivauz, Sohn, Armour-Peterson, & Bell, 2008). Some addiction researchers posit that problem drug use may be a type of relationship, and women users are prone to their inability to let go of unhealthy connections which further fuels the problem (Rivauz et al., 2008). Women in relationships with drug using partners have reported a fear of losing their relationship if they seek treatment and their partner does not. This phenomenon is said to be the root of ambivalence about treatment among women with drug-using partners (Rivauz et al., 2008). Additionally, when women and their partners are both using drugs, women's risk for intimate partner violence increases

substantially (Golinelli, Longshore, & Wenzel, 2008). Researchers have found that substance use by the woman and/or her partner independently predict intimate partner violence between them (Golinelli et al., 2008).

Researchers Bloom and Covington (1998) have found that a drug using woman may be seen as having a more serious problem, or acting in more socially abnormal ways than their male counterparts, deviating from the social norms of being a “good woman”, especially if she has children. She may be seen as not being able to live up to her roles as mother, nurturer and caregiver. These researchers have found that many of the women in their studies view their drug problem with shame and guilt (Bloom & Covington, 1998).

Socially, women may experience different negative experiences in their lives than do men (Andrews, Cao, Marsh, & Shin, 2011). As these researchers report, rates of physical and sexual abuse among the treatment-seeking population of women are very high (Andrews, et al., 2011). A disproportionate number of women who enter substance use treatment programs have experienced violence at the hands of their husbands or an intimate partner. However, it is not yet well understood if there is a causative or reciprocal relationship between intimate partner violence and drug use (Andrews et al., 2011).

In terms of health-related differences, women who use drugs are said to become “sicker quicker” than men. Researchers suggest that women experience the physiological effects of drugs differently than men (Back et al., 2011; Greenfield et al., 2010 ; Miller & Carroll, 2006). According to addiction researchers, women may undergo a phenomenon called “telescoping” where they rapidly transition from casual use to physiologic tolerance and dependence much faster than men (Greenfield et al., 2010 ; Miller &

Carroll, 2006). Typically referring to an advanced progression to dependence on opioids, marijuana and/or alcohol, telescoping has been consistently observed in studies on the gender-differences among drug users. Because of this phenomenon, women who enter treatment for substance use usually present with a more severe clinical profile even though their period of use may not be as long as men's. Women experiencing the telescoping phenomenon present with greater medical, behavioral, psychological and social problems than their male equivalents (DiClemente, 2003; Greenfield et al., 2010 ; Miller, 2006).

Researchers have also found that because of these differences, women may have a unique perception of their drug problem, need for treatment, and treatment options (Gwin Mitchell et al., 2011; McMurphy, Shea, Switzer, & Turner, 2006; Miller, 2006; Padaiga, Subata, & Vanagas, 2007). Women who become physiologically dependent on opioids and other drugs have disproportionately high rates of belonging to dysfunctional families and have had a history of physical and/or sexual victimization (Hanke & Faupel, 1993). Women may be more prone to problematic drug use and face concurrent obstacles to drug treatment because of social and practical barriers. They may be hindered from seeking treatment due to an intrinsic lack of motivation or extrinsic factors such as gender insensitivity in treatment programs, fear of legal implications such as losing their children, lack of transportation, childcare issues, lack of financial means to cover treatment, social stigmatization of being a female "junkie" and the lack of friend and family support. In addition, researchers report that women who do enter treatment do so to most often to please someone else, such as their partner or their parents, and that treatment-seeking is largely extrinsically-motivated. If that extrinsic force is not present,

women remain ambivalent about their need for treatment (Hanke & Faupel, 1993; Strain & Stitzer, 2006).

There are effective treatment options available for those who are opioid-dependent. To address the growing problem of opioid use, methadone replacement therapy is one option for treatment and has been available in the United States for more than forty years (Strain & Stitzer, 2006). Methadone, a synthetic (man-made) opioid, serves as a long-acting replacement to heroin and prescription pain medications.

However, even with the known problem of opioid use among women (Back et al., 2011; Greenfield et al., 2010 ; Strain & Stitzer, 2006; Unger, Jung, Winklbauer, & Fischer, 2010) and the documented effectiveness of methadone treatment (D. A. Calsyn et al., 2010; De Maeyer, Vanderplasschen, Lammertyn, van Nieuwenhuizen, Sabbe, et al., 2011; Padaiga et al., 2007; Strain & Stitzer, 2006), there are often not enough opioid treatment centers that foster women's unique recovery in a system also fraught with so many other obstacles such as a lack of transportation (Gwin Mitchell et al., 2011; Schwartz et al., 2008; Strain & Stitzer, 2006).

Over and over, it is suggested that women experience substance use and related problems differently than men. Women traditionally have multiple life-roles: those of mother, sister, daughter, wife, girlfriend, student and employee. These are the multiple roles that women often juggle differently than men (McMurphy et al., 2006; Strain & Stitzer, 2006). Additionally, while there may be a personal gain for recovering from drug use, it is hypothesized that women may enter treatment to satisfy people other than themselves, such as their partner (Greenfield et al., 2010 ; Strain & Stitzer, 2006).

Because of women's unique needs, researchers recommend more individualized recruiting and treatment services for women in drug treatment. Women-only therapy groups can help participants deal with issues such as anxiety about treatment, self-esteem, sexuality, personal health and communication and social skills as well as address issues related to physical, emotional and sexual abuse (Andrews et al., 2011; Strain & Stitzer, 2006).

Facilitators to treatment entry have been identified that make treatment and retention more appealing to women. Some of these factors include the woman's perception of available organization support, proper staff education, staff availability, and counseling support (McMurphy et al., 2006). Users also report that their perception of treatment success needs to be recognized and validated by the treatment staff (Gwin Mitchell et al., 2011; Trujols et al., 2011). In a qualitative study of men and women treatment participants, the majority viewed treatment as a "means to an end" and commonly stated that support within the program was crucial to their retention and success (Gwin Mitchell et al., 2011).

Despite what exists in the literature about women's special experiences and treatment needs, there remains a large gap in our current knowledge of how and why these unique experiences and perspectives finally lead women into methadone treatment and what being in methadone treatment is like for them. Very little work has been done thus far with women already in treatment.

Until the 1990s, women's health problems in general had received very little attention in the literature, partly because it was assumed that men's studies could be generalized to women (Greenfield, 2010). Because of the significant obstacles these

women often face, it is important to explore their journey from use to recovery and understand why their path led them to methadone treatment as well as what treatment has been like for them. This study will provide important insight to healthcare providers and others about the unique drug use and treatment experience of women and to understand what empowers women to seek help.

Statement of the Problem

Opioid use is a significant problem in the United States (Back, et al., 2011; Greenfield, 2010; Strain & Stitzer, 2006), and more new women are added to the tally each day. The literature hints that women experience substance use disorders differently than men and that their circumstances for seeking treatment and successfully entering treatment are unique. A deeper understanding of the backgrounds of these women and their motivation to enter methadone treatment in the face of many obstacles is incomplete. This study serves as an investigation into the experiences and expectations of women entering opioid replacement treatment with methadone.

Purpose of the Study

Although it is well documented in the literature that there is a growing problem of opioid use in the United States, it remains unclear why women as a unique sub-population of substance users decide to transition from use to recovery given the number and strength of the barriers that may stand in their way. While evidence exists that there are many obstacles to treatment, such as the lack of treatment centers and transportation, an exploration of the unique influences that propel women over these hurdles and into treatment remains incomplete. Additionally, it remains uncertain what factors promote and prevent a woman's navigation through recovery. It is crucial that we seek to

understand the experience of drug use among women given its substantial presence in the United States. It is equally important that we seek to understand the experience of women who choose to get help in order to facilitate better drug-treatment interventions that are gender-responsive to the needs of women.

The purpose of this study was to gather data from women entering methadone treatment that describes why they are seeking treatment and why they are doing it now. The study was framed by important findings existing in the literature, including the unique trajectory of women's substance use and women's recovery and treatment experiences. The qualitative research design of this study answers the question: how do women experience opioid use and why do they decide to seek recovery with methadone treatment? Because this topic is so meagerly discussed in the literature, this study serves as an important foundation to understanding this important phenomenon.

Situating the Researcher

After spending many years as a Nurse Practitioner in the field of correctional healthcare and working at a large, urban jail in Milwaukee County, my interest in substance abuse issues became profound. As I watched many opioid-dependent women and men withdraw from drugs in the jail I also started to become aware of the turmoil in their lives because of drug use. I paid particular attention to the issues of women, as it seemed that they became sicker and had more medical complications than the men. I then functioned as a research assistant for my doctoral work that quantitatively explored the experience of substance-abusing women with children to further situate my interest in the subject. Further, during my pilot work during my doctoral studies I was offered a position as a Nurse Practitioner within the methadone clinic where I was collecting pilot

study data. Here I was completing medical examinations on the patients and initiating and adjusting their methadone dose. I have been immersed in the lives of methadone patients, both during this study and for the seven years prior.

Research Aims

The primary research aims investigated by this study were:

How do women experience opioid and other drug use?

Why do women decide to seek recovery with methadone treatment?

What is their perception of being in methadone treatment?

The study was informed by asking the participants during a single, semi-structured interview about their journey through drug use and into treatment. Further probing has been used as needed to elicit the participant's responses about motivators and barriers to entering treatment as each participant tells her story.

Significance

As discussed, very few studies exist in the health care literature about the experience of women's entry into methadone programs. We have just begun to understand the unique circumstances of women when deciding to seek help as well as what motivates them to get help. This is an especially important phenomenon to investigate as methadone treatment is exhaustive but effective (Strain & Stitzer, 2006), and in a population of women who often have multiple life roles and stressors, the reasons behind choosing this type of treatment are important to appreciate. There is a need to understand these concepts in order to help facilitate women's entry into comprehensive and gender-responsive drug treatment.

The problem of opioid use in the United States is prevalent and it is important for those in health care settings, drug treatment centers and in policy making to be able to appreciate opioid dependence and recovery as a human experience. The process by which women decide to get help for drug problems offers nursing a unique perspective on how women contemplate and act on recovery. Nursing is especially poised to provide individualized care and have the potential to reduce stigma associated with this special population. By exploring the uniqueness of women who use opioids, nurses may be helped to understand their client's individualized pathways to recovery. Understanding the pathways to and from drug treatment using a holistic approach is achievable for nursing, and the anticipated results from this study will add to the knowledge base of comprehensive care of this special population.

Chapter 2

Literature Review

A review of the literature on opioid use and treatment-seeking is presented in this chapter. Literature was selected from online databases, journal manuscripts and books. The review begins with an overview of the significance of opioid use in the United States as well as general prevalence data. It follows with a presentation of the existing literature about the neurobiological models of drug addiction and includes information on some of the conceptual challenges of defining addiction. Next, treatment with methadone and its efficacy will be discussed. A discussion of factors involving the motivation to enter treatment among women and what we know about barriers and motivation for women's behavior change follows. Finally, significant gaps in the literature are summarized.

Literature for this review is selected from the National Library of Medicine's database called PubMed, the Cumulative Index of Nursing and Allied Health Literature database (CINAHL) and EbscoPsych databases for literature published within the years 1990 to 2013. The range of time for literature selection is based on the large wave of research on drug abuse in the early to mid-1990s. Literature was selected if it pertained to opioid use, opioid dependence, opioid treatment, methadone treatment, and motivation for behavior change related directly to women's substance abuse and behavior change. A combination of qualitative and quantitative studies is included in this review for completeness of exploring the problem. The quality of the literature is good including large-scale studies (quantitative studies with greater than 300 participants) and meta-analyses.

Overview of the History of Opioids

This section begins with an overview of natural history of opioid abuse and then describes the different classes of opioids and their availability. Opioid use has been existent for centuries in many countries. There is anthropological proof that the opium poppy was used in ancient healing rituals as many as ten thousand years ago (Doweiko, 2009). Over the last three hundred years, compounds extracted from the opium poppy have been used to treat ailments from pain to diarrhea to anxiety. With the advent of the hypodermic needle in 1857, a more rapid delivery of the compounds directly into the bloodstream was discovered. At the turn of the nineteenth century, the opium derivative morphine was being used to cure even the common cold (Doweiko, 2009). It was not until the end of the nineteenth century that the concept of addiction was even considered. The unregulated use of opioid compounds was further exacerbated by the immigration of Chinese railroad workers who introduced the method of smoking opium to the US. It was not until the Harrison Narcotic Act of 1914 that the federal government began to regulate the availability of opioid compounds without a prescription (Doweiko, 2009; Strain & Stitzer, 2006).

Classes of Opioids

There are three different classes of opioids. Natural opioids are obtained directly from opium poppy resin and include the substances morphine and codeine. Semisynthetic opioids are natural opioids which have been chemically altered, such as heroin. Finally, synthetic opioids are chemically derived in laboratories and are not taken from natural opium at all. The most common replacement therapy for opioid addiction treatment is the synthetic opioid methadone. The advantage of using synthetic opioids is

that they are chemically pure and can be designed with a longer half-life and a better bioavailability profile (Doweiko, 2009).

Some opioids are available by prescription for the treatment of acute and chronic pain. Opioids are very effective for easing moderate to severe pain when used properly. However, for reasons unclear, the number of opioid prescriptions written over the last ten years has more than doubled. This increases the risk for diversion of prescription medication, or the transferring of medication to a person for whom it is not intended. Prescription opioids also carry the risk for physical dependence in those taking it for the management of pain. When opioids are used for purposes other than for the treatment of pain and by the person to whom they were not prescribed, it is termed *nonmedical use* (Doweiko, 2009).

Following a ten-year longitudinal study of the consequences of the nonmedical use of prescription opioids, Manchikanti and associates (2010) established that the most common age group to use prescription opioids are those aged eighteen to twenty-five. According to their work, it is estimated that males have a higher prevalence rate of overall illicit drug use than women, but have very similar prevalence rates of the nonmedical use of prescription opioids (2.0% versus 1.8%). In addition, over thirty percent of those who concurrently reported a severe acute or chronic medical illness reported past year illicit drug use as compared to those without any medical problems (12.9%). In terms of the ability to access prescription opioids for misuse, 55.9% reported receiving the drug for free from friends or family and 81.7% of that group reported that their friend or family member was prescribed the drug by a healthcare provider. Another 8.9% purchased the drug from friends or family. An additional 18% reported being

prescribed the drug by their own provider but not taking it as prescribed. Only 4.3% reported purchasing the drug from a street dealer (Manchikanti et al., 2010; *Results from the 2012 National Survey of Drug Use and Health: Summary of National Findings*, 2013). Along with the methods of diversion, the most common motives behind the nonmedical use of prescription opioids (found in both qualitative and quantitative studies) are to get high, to relieve pain, to relieve stress of anxiety, to sleep, and to experiment (Ibanez, 2010; McCabe, Cranford, Boyd, & Teter, 2007).

In terms of the initiation of drug use, some researchers have found that people addicted to opioids first began with obtaining licit prescription pain medications (either by their own healthcare provider or from friends or family) prior to getting drugs from illicit sources. Many of them moved to using heroin because of the lesser expense and greater effectiveness at achieving a high than prescription medications (Canfield et al., 2010).

The Construct of Opioid Use Disorder

In the previous version of the DSM, version 4 (*DSM-IV*), substance abuse and substance dependence were differentiated, primarily by the negative physiological effects of dependence, and were two separate constructs. In the 2013 DSM-5, the two have been combined into the category of *substance use disorders* and therefore the criteria for diagnosing each have been combined into a single list. In the existing literature, and the literature used for this review, substance use was differentiated into the constructs of abuse and dependence. Abuse was classified as the causal use of drugs without the buildup of tolerance and without withdrawal; dependence was the negative physiological effects of stopping the use of a drug and the need to seek help to overcome the drug

problem. While the current DSM-5 construct of opioid use disorder is employed in terms of discussion, it is important to note that the literature reviewed uses the terms abuse and dependence independently as in the DSM-IV.

According to the DSM-5 there are eleven criteria used to define *substance use disorders*:

1. Taking the substance in larger amounts or for longer than the you meant to
2. Wanting to cut down or stop using the substance but not managing to
3. Spending a lot of time getting, using, or recovering from use of the substance
4. Cravings and urges to use the substance
5. Not managing to do what you should at work, home or school, because of substance use
6. Continuing to use, even when it causes problems in relationships
7. Giving up important social, occupational or recreational activities because of substance use
8. Using substances again and again, even when it puts the you in danger
9. Continuing to use, even when the you know you have a physical or psychological problem that could have been caused or made worse by the substance
10. Needing more of the substance to get the effect you want (tolerance)
11. Development of withdrawal symptoms, which can be relieved by taking more of the substance.

From DSM-5(APA, 2013).

The DSM-5 categorizes the severity of substance use disorders based on the number of criteria endorsed by the user of the eleven listed: 2–3 criteria indicate a mild

disorder; 4–5 criteria, a moderate disorder; and 6 or more, a severe disorder. For those who are in drug treatment or have abstained, early remission from a DSM-5 substance use disorder is defined as more than three but less than twelve months without substance use disorder criteria (except craving), and sustained remission is defined as at least twelve months without criteria (except craving). (APA, 2013).

Physiologic Effects of Opioids

In order to understand the problem of addiction, it is essential to understand the physiological changes that occur in the body with the use of opioids. These changes are alluded to in the DSM-5 criteria 4, 10 and 11 and were formerly used to describe substance *dependence* (APA, 2013). Those who become physiologically tolerant and withdraw from a drug develop an alteration in their brain chemistry such that they experience very unpleasant physical effects. Dependence begins with a tolerance to the drug, or the need to use more and more of the drug to achieve the same effects.

With the use of opioids, the brain releases the potent neurochemical dopamine, which is largely responsible for the euphoric rush experienced with opioid administration. Dopamine causes feelings of pleasure and reward. Opioid use further promotes this flood of dopamine by preventing its normal reuptake by the parent neurotransmitter, thus enabling more dopamine to circulate in the brain. Over time, though, the parent neurotransmitters become burned out. As dopamine floods the system repeatedly, it also prevents the release of the neurotransmitter N-methyl-D-aspartate (NMDA) which can lead to a phenomenon called tolerance (Erickson, 2007; Strain & Stitzer, 2006).

Tolerance is the need to continue increasing the amount of a drug in order to achieve the same effects as once felt. This continued tolerance and changes at the

neurotransmitter site lead to the phenomenon of physiological dependence. The neuroadaptation model suggests that changes at the neurotransmitter level lead to a phenomenon called neuroadaptation, which is the change of the brain's normal set point for the amount of circulating neurotransmitters such that the user only feels "normal" when the drug is on board. Those who are dependent no longer seek opioids to get high; rather they must continue to use to feel normal. Discontinuing or withdrawing opioids causes the brain to react significantly, since this normal set point is now disrupted. When this occurs, negative physical consequences develop. Withdrawal symptoms tend to be the opposite of the usual euphoria of opioid and include restlessness, sweating, chills, irritability, anxiety, gastrointestinal distress, body aches and dilated pupils (*American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders* 2000; Cavacuiti, 2011; Erickson, 2007; L. Nicholls, Bragaw, & Ruetsch, 2010; Ruetsch, 2010; Strain & Stitzer, 2006).

This background on the history of opioids and addiction is important when discussing the treatment of opioid use disorders. An understanding of the natural history of opioids, how they react in the brain and the past and current approaches to treatment is important context to consider when discussing the problem of opioid use disorders.

Neurobiological Model of Abuse and Dependence: Conceptual Discussion

Although the exact mechanisms are largely unknown, opioids create a sense of euphoria for the user by over-activating the pleasure centers in the brain (Doweiko, 2009). When the user is not experiencing pain (prescription opioids are analgesics), the pleasure centers are activated even further. The most commonly used opioids in our country are heroin, Oxycontin®, Vicodin®, and codeine (SAMHSA, 2011). Although

opioids do not lead to long-term organ damage, when used in manners other than how prescribed, prescription (and illicit) opioids can have serious negative health effects. Opioids are central nervous system depressants, and when misused can lead to psychomotor impairment, respiratory depression, sedations, loss of consciousness and sudden death (Doweiko, 2009; Erickson, 2007; Garnier et al., 2009). Even though opioid withdrawal is usually not fatal, withdrawal generally involves pronounced gastrointestinal symptoms such as diarrhea and vomiting as well as potential dehydration that can indirectly lead to severe illness and death (Doweiko, 2009).

Substance use disorders often begin with an individual's experimentation of one or more drugs. Users experience a pleasant, pharmacological reward experience which influences their decision to continue drug use. As the reward sensation of drug use continues, social use and early problem drug use develop. As use progresses, heavy problem use and early addiction can develop, such as missing work or school and deterioration in relationships with friends and family. It is at this stage that users may experience medical problems related to their use including withdrawal symptoms if abstinent from the drug. Over time, particularly in the case of opioid drugs, tolerance develops. Tolerance is an effect where the same amount of the drug no longer produces the same reward effect. As withdrawal symptoms occur in the abstinence of drugs and tolerance builds, the opioid drug hijacks critical chemicals and structures in the brain, and the phenomenon of physiological dependence results. The transition has been described as a movement from impulsive to compulsive behavior, from a strong but controllable craving to use a substance to the substance overcoming the person's entire life such that

all efforts by the person are directed toward obtaining and using the substance (Cavacuiti, 2011; Doweiko, 2009; Erickson, 2007; Ruetsch, 2010).

The changes in the brain that occur during ongoing opioid use lie in the mesolimbic dopamine system of the brain (Erickson, 2007). Dopamine is responsible for our feelings of pleasure and reward and, in some degree, to motivation to carry out a behavior that the brain perceives as pleasurable. The regulation of dopamine is crucial to our ability to experience pleasure and pain, motivation and emotional responses. In fact, the mesolimbic dopamine system (MDS) is known as the “reward pathway” of the brain (Erickson, 2007). It has been suggested that the use of opioids releases five to ten times more dopamine than natural endorphin-producing activities such as exercise, food and sex (Erickson, 2007; McMurphy et al., 2006; Strain & Stitzer, 2006).

The person who uses opioids experiences a dopamine neurotransmitter deregulation over time. Opioids enter the brain and attach to the *mu* opioid receptor (*mu* coming from the Latin root for morphine). Here, they mimic the body’s natural endorphins which give a sense of pleasure and reward, however with much greater potency. Opioids also block the effects of the excitatory neurotransmitter NMDA (N-methyl D-aspartate), which prevents the neuron’s reuptake of dopamine and thus potentiates the flood of dopamine affecting the user. Interestingly, it has also been postulated that opioids also alter critical structures in the brain’s prefrontal cortex, the region that controls impulsive behavior (Cavacuiti, 2011; Doweiko, 2009; Erickson, 2007).

Treatment

The synthetic opioid methadone as a treatment for dependence was introduced to the United States from Europe in the 1960's in response to the mounting national epidemic of heroin use and dependence. Developed in the 1940's in Germany, methadone was first used to treat pain and coughing. It is still used now to treat pain at low doses. At its inception, methadone was developed by Eli Lilly and Company under the brand name Dolophine® (*dolo-* for the Latin *dolor*, meaning pain). The efficacy of methadone was studied in Europe starting in the 1940's, introduced to the United States in the 1960's, and finally approved by the US Food and Drug Administration for use in 1972. Since its introduction to the US, methadone has been very tightly regulated by the federal government with administration of methadone for opioid treatment to licensed treatment centers under the supervision of specially-trained providers (Strain & Stitzer, 2006).

Methadone attaches to the opioid receptor of *mu* neurotransmitters as would heroin or prescription opioids. It also acts as an antagonist (blocker) at the NMDA receptor site where it is presumed that methadone may help to reverse the effects of tolerance. Methadone is processed in the body by the liver and excreted in the urine. In its oral form, methadone is highly bioavailable and highly protein-bound, leading to its long onset and offset of action and long half-life of twenty-four to thirty-six hours. When full blockade of the receptors is achieved with a stable methadone dose, the user no longer experiences pleasurable effects when other opioids are used, known as the phenomenon of cross-tolerance (Doweiko, 2009; Lobmaier, Gossop, Waal, & Bramness, 2010; L. Nicholls et al., 2010; Stotts, Dodrill, & Kosten, 2009).

Efficacy of Methadone

The majority of research on methadone's efficacy has been done with both male and female populations. Several investigators have found that methadone maintenance therapy (MMT) not only can lead to abstinence of illicit opioids but can enhance retention in recovery treatment, decrease criminal activity, reduce HIV and infectious disease risk behaviors and mortality (D. A. Calsyn et al., 2010; Nyamathi et al., 2010 ; Stotts et al., 2009; Wilson, 2007; Wu et al., 2010). Only two known randomized controlled trials on the efficacy of methadone exist in the literature. Strain and Stitzer (2006) believe that this is because of the difficulty in assigning groups to a placebo, where inevitably they would experience opioid withdrawal and many would drop out of the study. The first successful study was done by researchers in Hong Kong from 1970-1972, around the time methadone was approved in the US, these investigators found that participants were able to abstain from opioid use while on methadone. The only other known study was done by Strain and colleagues in Baltimore, Maryland in the 1980's. These investigators concluded that those administered 50 milligrams of methadone daily experienced less craving, less withdrawal and less opioid use than those given zero milligrams (Strain & Stitzer, 2006). Certainly, methadone administration is done in accredited and state monitored settings where intensive behavioral therapy is integral to methadone's success. Although proper dosing remains controversial because of the wide degree of variability between individuals' response to the medication (and confounding factors such as family and social relationships), methadone therapy remains the mainstay

of opioid treatment (Kreek, Borg, Ducat, & Ray, 2010; L. Nicholls et al., 2010; Stotts et al., 2009; Strain & Stitzer, 2006).

Wilson and colleagues (2010) report, in their sample of 319 adult heroin-using men and women actively enrolled in methadone maintenance therapy (as opposed to those on a waiting list for entry to MMT), that a significant number of participants reduced both heroin and cocaine use and criminal behavior within the first four months of treatment. HIV and infectious disease risk behaviors declined at 6 months between the two groups, such as needle-sharing, sharing of other paraphernalia (“cookers”, etc.) and injecting in the presence of other people, which can lead to risky sexual behavior and sex under the influence. Although MMT programs have been found to decrease sexual risk behaviors, in a study of 255 women in MMT and 260 women undergoing counseling only (without medications) for heroin abuse surprisingly found that the overwhelming majority of both groups (79.5% and 80.9% respectively) engaged in unprotected sexual activities while in treatment (Tross et al., 2009). Long term survival rates among injecting drug users enrolled in methadone maintenance treatment at high risk for contracting HIV and hepatitis has been found to be higher than those not in treatment (D. A. Calsyn et al., 2010; Kimber et al., 2010). In addition, it has been postulated that the longer users are able to stay in methadone treatment, the less likely they are to relapse (Frances, Miller, & Mack, 2011; Kreek et al., 2010; Miller, 2006; Padaiga et al., 2007; Strain & Stitzer, 2006).

Methadone must be administered in accredited treatment centers by specially trained nurses and prescribed by specially trained providers (Strain & Stitzer, 2006). In the early phases of treatment (generally the first ninety days), clients are required to

attend the treatment center every day for dosing and monitoring. As time progresses, clients are eventually issued take-home doses and need to attend the clinic less frequently although active and frequent participation at the treatment center remains a requirement (Strain & Stitzer, 2006). Although this time commitment places a burden on the client, research shows that the longer one spends in treatment the better their outcomes will be (Gwin Mitchell et al., 2011).

Effective treatment relies on a combination of methadone and counseling. Opioid replacement therapy with methadone implies the combination of medication therapy as well as behavioral counseling and as such can be an extremely complex and time-consuming process for the user. Daily visits to the treatment center are essential to receive proper medication and counseling (Strain & Stitzer, 2006). In terms of the combination of methadone and counseling, no single modality will work well without the other (Strain & Stitzer, 2006). Methadone allows the user to feel “normal”, and not sick, while being able to engage in therapy. A review of the literature shows that methadone treatment is highly effective in positively impacting many facets of the user’s life, including improving their perceived quality of life (Calsyn, et al., 2010), reduction in risky sexual activity and thereby hepatitis and HIV risk (Nyamathi, et al., 2010), and improving their long-term ability to abstain from opioids leading to better survival rates over time (Corsi, Lehman & Booth, 2009). Among women in particular, methadone treatment has been said to decrease the risk behaviors of sex under the influence of drugs, suggesting that the treatment environment may be a valuable opportunity to counsel women on HIV, hepatitis and other sexually transmitted diseases (D. Calsyn et al., 2010; Corsi, Lehman, & Booth, 2009; Nyamathi et al., 2010).

Cautions with Methadone

Methadone, despite its established advantage of decreasing opioid use, craving, withdrawal, HIV and infectious disease risk behavior and drug-related criminality, is not without its disadvantages in some situations. Treatment tends to be exhaustive, generally requiring that the patient visits the treatment facility for daily dosing. Although rare, if not monitored properly, methadone can cause serious negative health-related consequences such as harmful prolongation in the electroconductivity of the heart, respiratory depression, sedation, and, in very rare cases, death (Jones, et al., 2010). Investigators who examined these negative effects concluded that polysubstance abuse (the use of more than one substance together) can potentiate the risk of negative health-related consequences (L. Nicholls et al., 2010). Therefore, methadone treatment centers are required to drug-screen each patient for other illicit drugs prior to administration of methadone. Although safe to use during pregnancy and lactation, babies who are born to mothers on methadone are at risk for a phenomenon called *neonatal abstinence syndrome*, a condition by which the newborn withdraws from methadone at birth. Infants with neonatal abstinence syndrome may be born premature and with decreased length and head circumferences (Jones et al., 2010).

There are no long-term studies in the literature on the effects of neonatal exposure to methadone throughout life, however with appropriate post-natal care, most infants recover from opioid dependence quickly (Jones et al., 2010; Kimber et al., 2010; Lobmaier et al., 2010). Although methadone use during pregnancy is not without risk, investigators posit that the structured environment of methadone maintenance programs combined with counseling results in better mother and fetal-infant outcomes than if the

mother continued to use heroin and/or intravenous drugs (Lobmaier et al., 2010).

Researchers have concluded that an educated appreciation of the pharmacology of methadone as well as the appreciation for its safety profile should be considered, and that close patient monitoring (especially of those on high doses of the drug) be made. This approach, combined with addiction counseling and behavioral therapy, makes methadone maintenance therapy an effective treatment option for pregnant women (Jones et al., 2010; Kreek et al., 2010; Modesto-Lowe, Brooks, & Petry, 2010; L. Nicholls et al., 2010; Strain & Stitzer, 2006; Woods & Hilaire, 2010).

Contingency Management

Although methadone when combined with behavioral therapy is an effective means of treating opioid use, the problem does not exist in a silo. Often, other negative behaviors are associated with opioid use such as the use of other drugs (like cocaine and marijuana) and sometimes criminal activity. In recent years, in an effort to control these extraneous negative behaviors, the idea of contingency management was conceived. The theory behind contingency management is that if rewards are given for good behavior within the treatment setting that other negative behaviors not accounted for by medications would also cease. This is true when considering theories of learning and behavior. With contingency management, patients are offered an “attractive” option such as clinic privileges (like more take-home doses) or monetary gifts or prizes. For example, for each “clean” urinalysis a patient submits (free of other opioids, cocaine, and marijuana for example), they are given an extra take-home dose or are entered into a drawing to win a prize. This method can also free up valuable clinic resources (such as

allowing more take homes and less visit days to the clinic) so the clinic may be able to accept a higher census and new patients (Miller, 2006; Strain & Stitzer, 2006).

Contingency management has been used with men and women in methadone treatment for smoking cessation with cash rewards and for cocaine and heroin abstinence with the opportunity to draw for a prize. In most studies to date, about half of the treatment sample has responded positively to the contingency management method (Dunn, Sigmon, Thomas, Heil, & Higgins, 2008; Ghitza et al., 2008; Preston, Ghitza, Schmittner, Schroeder, & Epstein, 2008; Weinstock, Rash, & Petry, 2010). Unfortunately, none of the studies reviewed differentiated response rates to contingency management by gender.

Prize drawings may be more cost-effective in treatment centers with less funding or fewer resources. In a cost-effectiveness study of 388 participants in six methadone maintenance community clinics across the country, the cost of using prize-based contingency management was an estimated \$141 per patient [95% CI, \$105-\$193] (Sindlear, Olmstead, & Peirce, 2007) compared with the ten to thirty dollar monetary prizes given for each clean urinalysis in other studies (Dunn et al., 2008; Ghitza et al., 2008).

History of Methadone Treatment in Texas

This study was done using a population of women methadone patients in a part of the Dallas-Fort Worth Metroplex, therefore some understanding of the history of methadone in Texas is important. Texas has a long history of opioid treatment centers including a unique center operating from the 1930s through the 1970s specifically for the rehabilitation of drug addicted men. First employing counseling and rehabilitative

strategies, the center began using methadone to treat heroin addiction in the 1970s. On May 26, 1935, the *New York Times* published an article featuring the grand opening of a 1,400-bed drug inpatient drug treatment facility in rural Fort Worth, Texas that would rehabilitate drug-addicted men with counseling and behavioral therapy. Known as the “Fort Worth Narcotics Farm”, the facility housed and treated men dependent on opioids and promoted agriculture, education and rehabilitation in its intensive program. Men were treated with methadone and counseling services. The treatment center mirrored only one other of its kind at the time in Lexington, Kentucky that was originally designed as a prison diversion program. Both narcotics farms were operational until the late 1970s. The farms were developed in part by Dr. Hugh S. Cumming, Surgeon General of the Federal Public Health Service, who dedicated the completed Narcotics Farms in Fort Worth and Lexington to "instinctive demands" of the American people "that the sick and afflicted shall be set in the way of strength and hope." The farm in Fort Worth, Texas was demolished in the late 1970s and is now an empty field.

Challenges for Women Who are Addicted to Opioids

While each client enters methadone treatment as an individual who brings with them his or her unique life experiences, researchers support that women present with a different set of circumstances than men (Greenfield, 2010). Researchers have discussed that women report a higher prevalence of co-occurring medical and psychiatric problems, such as eating disorders, chronic pain and depression, than men (Greenfield, 2010; Jamison, Butler, Budman, Edwards, & Wasan, 2010).

Women who use drugs often face a disproportionate level of physical and emotional abuse, and often are part of a relationship where their partner is also abusing

drugs. They feel that they are viewed as socially abnormal, and they often juggle multiple life roles such as motherhood. Many have had experience with the criminal justice and child welfare systems. In addition, women addicts may trade sex for money or drugs, further exacerbating their problems related to drug use and increasing their health risks (Bloom & Covington, 1998; Manhal-Baugus, 1998).

In a qualitative study of women drug users and their intimate partner relationships where their partner was not using drugs, women participants described themselves as being “damaged goods”, “not strong enough” to leave the relationship and work on recovery, and asking themselves, “who’s in charge of my life?” as they struggled to empower themselves to seek treatment (Rivauz et al., 2008). Perhaps more importantly, it has been discussed in the literature that women report difficulty in “seeing themselves” in a non-drug-using world. This concept of “disengagement” has been studied in the sociological perspective (Martin, 2011; Rivauz et al., 2008).

Methadone Treatment among Women

Strain and Stitzer have said that methadone is an effective treatment option for opioid-dependent women (Strain and Stitzer, 2006). Strain and Stitzer found that 160 of the NSDUH respondents who have received help with methadone found positive health and social effects among them such as the decline of risky sexual activity. Among female participants in the study, the odds ratio for trading sex for drug money at baseline was 0.03 ($p = 0.002$), compared to an odds ratio of 0.34 ($p = 0.221$) after six months in methadone treatment. The odds ratio of having sex under the influence of drugs at baseline was 0.06 ($p < 0.001$) compared to 0.61 ($p = 0.249$) after 6 months (Corsi et al., 2009). Among pregnant women, methadone has been used safely during pregnancy and

lactation for years, despite the lack of clinical trials (Jones et al., 2010). Outcomes of pregnant mothers who are in methadone treatment are considerably better than those who continue to use illicit drugs. Compared with continued use of drugs, methadone treatment can result in better prenatal care, better overall fetal growth, a decreased risk of preeclampsia and a decreased risk of contracting HIV and other infectious diseases. (Jones et al., 2010; Strain & Stitzer, 2006).

Overall perceived quality of life may be positively affected by methadone treatment among women. Women have reported that their health-related quality of life had improved as their involvement in methadone treatment progressed (De Maeyer, Vanderplasschen, Lammertyn, van Nieuwenhuizen, & Broekaert, 2011; Padaiga et al., 2007; Williamson, Darke, Ross, & Teesson, 2009). A phenomenon that has been discussed briefly in the literature is the association between perceived health related quality of life of women and how this may affect treatment seeking and treatment retention. Inspection of the few studies in the literature reveals that the self-reported health related quality of life of women entering methadone maintenance is similar to people with a severe physical illness (Padaiga et al., 2007; Williamson et al., 2009). Although not conducted with the United States population and perhaps skewed by the site of the research, a bi-gendered study of 102 opioid dependent men and women in Lithuania found that women reported poorer health related quality of life than men but were more motivated to seek treatment. Men, on the other hand, reported better health related quality of life but also less motivation to seek treatment. This study may loosely represent an association between perceived health status and the drive to seek treatment, especially among women. (Padaiga et al., 2007). Conversely, a US study of 159

participants five years after starting methadone treatment found no significant difference between drug use and perceived quality of life but did find a significant negative effect on psychosocial distress between both genders (De Maeyer, Vanderplasschen, Lammertyn, van Nieuwenhuizen, Sabbe, et al., 2011).

The Construct of Change

Although the burden of opioid dependence and the effectiveness of its treatment are well represented in the current literature, there are very few studies which examine the users' motivations to enter and remain in the treatment. Although barriers to care have been studied (Gryczynski, Schwartz, O'Grady, & Jaffe, 2009; Reisinger et al., 2009; Schacht Reisinger et al., 2009; Zaller, Fu, Bazazi, & Rich, 2010), studies of attitudes and motivations for treatment-seeking are sparse (Schwartz et al., 2008).

Facilitators to treatment entry have not been widely studied, though there are factors that have been identified that make treatment and retention more appealing to users. Some of these factors include the patient's perception of available organization support, proper staff education, staff availability, and counseling support (McMurphy et al., 2006). Patients also report that their perception of treatment success needs to be recognized and validated by the treatment staff (Gwin Mitchell et al., 2011; Trujols et al., 2011). In a qualitative study of treatment participants, the majority viewed treatment as a "means to an end" and commonly stated that support within the program was crucial to their retention and success (Gwin Mitchell et al., 2011).

Motivation for treatment involves a particular action and a reason for selecting that action, as is the case for motivation for anything else. The reasons for selecting opioid treatment are often context-based. For example, judgments about what normal

behavior is (“I don’t use any more often than friends of mine do”) and rationalization tends to be an obstacle to treatment entry. Physical barriers such as the location of the treatment center and available transportation may exist. Societal contingencies for getting help are strong motivators but may be positive or negative. Receiving pleasure-invoking drugs from family or friends for free may reinforce ongoing drug use. In a perfect world, the user would be able to remove him or herself from an environment which promotes drug use, although this is not always possible. (Erickson, 2007; Miller, 2006).

Motivation to Change

The theoretical underpinning of treatment motivation is the concept of change. Those who enter treatment have made a decision to change their behavior and motivation is directly related to the stage of change an individual is in. In the Transtheoretical Model of Change (TTM), individuals may decide to enter treatment based on the expectation that they will gain more than they will lose. Each person’s motivation for deciding to change is different and how they convey recovery is unique. Weighing what they may gain or lose from treating their problem drug use is called “decisional balance”, which becomes important when measuring the user’s readiness to change. According to the TTM and addiction, there are five stages of change: the precontemplation stage, where it is expected that action will be taken to think about entering treatment within the next six months *or* there is a denial that a problem even exists; the contemplation stage, where the user intends to enter treatment to change their behavior within the next six months; the preparation stage, where they plan to make this behavior change in the next month; the action phase, where there is active participation in treatment; the maintenance

phase, where the user is established in treatment and is no longer using drugs; and finally the termination stage, where the user has zero temptation to relapse into drug use (only about twenty percent of people make it to this stage) (DiClemente, 2003).

Barriers to Methadone Treatment among Women

For women who make the decision to seek help for opioid use, outpatient programs are the primary source of assistance (either a structured maintenance treatment program or care from a primary provider), according to a large, national database (SAMHSA, 2011). Opioid replacement therapies with agonists such as methadone have been the most widely used and effective means for dependence treatment and have had the most effective short and long-term results (Doweiko, 2009; Kreek et al., 2010; Lobmaier et al., 2010; L. Nicholls et al., 2010; Stotts et al., 2009).

Although the burden of opioid use disorder and the effectiveness of its treatment are well represented in the current literature, there are very few studies that examine the users' experience of drug use and motivation to enter and remain in treatment. Although barriers to care have been studied (Gryczynski et al., 2009; Reisinger et al., 2009; Schacht Reisinger et al., 2009; Zaller et al., 2010), studies of women's attitudes toward women's drug use problem, efficacy of treatment and motivations for treatment-seeking are sparse (Schwartz et al., 2008).

There are studies in the literature about physical barriers to accessing methadone treatment (Greenfield, et al., 2010; Gwin-Mitchell, et al., 2011; Hanke & Faupel, 1993; Martin, 2011; Miller & Carroll, 2006; Schwartz, et al., 2008; Trujols, et al., 2011). Logistically, women who decide to seek treatment are often faced with shortages in the availability of methadone treatment programs. Social stigma associated with seeking

treatment may be a major psychosocial barrier among women, as well as physical barriers such as lengthy waiting times, transportation issues and limited treatment resources (McMurphy et al., 2006). In addition, treatment centers are usually detached from usual medical care settings, making access difficult. In the United States, opioid-dependent patients often face scarce availability of treatment centers, long waiting lists and lack of funding for treatment. Some areas of our country have no accessible clinics at all. In addition, there may be social stigma related to treatment-seeking from healthcare providers themselves. In a qualitative study of twenty-seven New York State general medical clinic physicians, only 17% were willing to consider referring a patient into methadone treatment. When asked to describe their perceptions of patients in methadone programs, the most common responses were “manipulative, demanding, difficult, argumentative, unemployed, undesirable, time-consuming and noncompliant” (McMurphy et al., 2006).

Aside from this negative view of methadone patients, financial issues such as the lack of money or health insurance, time-consuming treatment and a lack of the overall accessibility of treatment centers were identified by opioid users. Some even reported the necessity for an identification card to enroll in treatment as a barrier (McMurphy et al., 2006; Peterson et al., 2010).

Facilitators to treatment entry have not been widely studied, though there are factors that have been identified that make treatment and retention more appealing to users. According to McMurphy and colleagues (2006), some of these factors include the patient’s perception of available organization support, proper staff education, staff availability, and counseling support (McMurphy et al., 2006). Patients also report that

their perception of treatment success needs to be recognized and validated by the treatment staff (Gwin Mitchell et al., 2011; Trujols et al., 2011). In a qualitative study of treatment participants, the majority viewed treatment as a “means to an end” and commonly stated that support within the program was crucial to their retention and success (Gwin Mitchell et al., 2011).

The only known study in the past five years in the literature on gender-related factors in opioid use driving people to seek medication-assisted treatment is a study on the efficacy and pharmacokinetics of buprenorphine, an alternative opioid replacement therapy done outside of a fixed treatment center, in women. Unger and associates (2010) suggest that gender is a strong biological determinant of health and mental illness and a strong element in the ability to control important socioeconomic factors such as status, family roles and employment options. In their work, the association between quality of life affecting opioid use disorder among women is congruent with previously discussed literature on this association.

Some women who are in long-term relationships with drug-abusing partners report feeling more supported when their partner is in treatment with them. Some women reported the presence of friends or family at the treatment center was a barrier to their recovery because it is an individual process. Universally, studies among women with children found that having children was a strong motivator for women to enter and be successful in drug treatment (Hamilton & Grella, 2009). MORE REFS

An additional concept in the recruitment and retention of opioid users in treatment is the concept of lifelong recovery. Even though researchers reports that close to twenty percent of opioid users who enter methadone treatment complete it and remain abstinent

after treatment, it is also reported that opioid dependence is usually a long-term condition known for frequent relapses (Gwin Mitchell et al., 2011). It is important to note that those who have previously completed methadone treatment successfully, but then relapsed, often have successful outcomes in subsequent methadone treatments. Because of these successes, relapses and successes, the recovery process has been sometimes called a “drug treatment career” (Gwin Mitchell et al., 2011).

Gaps in the Literature

Although physiological and psychological effects of opioid use may muddle the process of treatment, understanding women’s motivation and intentions to seek help are a crucial part of recovery (DiClemente, Schlundt, & Gemmell, 2004). We do not yet have a good understanding of what it is like for women to experience problem opioid use and the need to get help. Locating sufficient literature on women’s experiences with methadone treatment has proved challenging. The current literature on opioid dependence and treatment is rich with studies on the general prevalence of the problem, its significance and the description and effectiveness of different treatment modalities; however an understanding of the experience among women who choose this exhaustive type of treatment is quite incomplete.

An understanding and appreciation of the influences that drive women to seek help will advance the science of addiction and nursing and potentially generate more individualized treatment programs, as individualized programs have been studied in the literature as resulting in better patient satisfaction and retention in treatment (Trujols et al., 2011). The ability to individualize care is an important phenomenon in nursing care, and as such any studies that can differentiate the care women as unique individuals will

add to the knowledge base of the discipline. This study will help inform important policymaking decisions as its findings will help to explain women's perceived value of treatment programs as well as to address physical barriers such as the availability of treatment centers and transportation issues. The following study has been completed to investigate these gaps and describe how nursing can benefit from the findings. The main objective of this study was to gain a better understanding of women's unique experiences of opioid use and their motivations and expectations entering methadone treatment.

Chapter 3

Methodology

The chosen methodology for the study as well as the procedures used to complete the data collection and analysis are discussed in this chapter. According to Polit and Beck (2008), the most important factor in determining the appropriate methodology of a study is the research question itself. The research question serves as a guide for the determination if a study will be qualitative, quantitative or a mixed method of the two. Making important decisions about the design of a study early can increase the chance of a study's success in collecting and concluding accurate information (Colling, 2003). The appropriate design of a study depends on what evidence is required to answer the research questions (Holt, 2009). To begin to address the large gap in the literature on women's narrative experience in entering methadone treatment, a qualitative methodology was used to gather accounts of individual women as they enter treatment.

The research questions addressed in this study are:

How do women experience opioid and other drug use?

Why do women decide to seek recovery with methadone treatment?

What is their perception of being in methadone treatment?

Design of the Study

A cross-sectional, qualitative methodology was employed to capture the unique stories of women entering methadone treatment. Qualitative research has its roots in philosophy, sociology and anthropology, and dates back to the early parts of the twentieth century (Ritchie & Lewis, 2003). More structured forms of the methodology emerged in the 1930's and a steady growth in qualitative research has been seen primarily since the

1960's (D. Nicholls, 2009). Its methodology employs a variety of approaches, such as phenomenology, ethnography, and grounded theory. In contrast to quantitative research, qualitative research seeks to examine multiple truths rather than a single, absolute truth (D. Nicholls, 2009; Ritchie & Lewis, 2003).

Qualitative research has several assumptions (D. Nicholls, 2009; Ritchie & Lewis, 2003). Primarily, there is no predetermined theoretical framework- rather the theory, if any, is derived from the data. Secondly, qualitative research is very context-driven. It is important that the researcher be context-driven as well. In qualitative methods, researchers immerse themselves within the natural setting of the participants, and the setting is rarely forced or unnatural. Finally, qualitative researchers focus on the *emic* perspective that concerns itself with the views, realities and meanings given by others. They seek to analyze, describe and interpret the views of others. Qualitative researchers generally develop a close relationship with the participants in order to accomplish this.

This study uses an *interpretive phenomenological analysis* (IPA) approach throughout the study from planning to data collection to analysis. This methodology is used to illuminate each participant's variation of the same general phenomenon (in this case, entry to methadone treatment) (Reissman, 2008; Ritchie & Lewis, 2003).

Interpretive phenomenological analysis as a method is concerned with the lived experience of phenomena *on its own terms*. Generally speaking, IPA methods invite an unstructured or semi-structured interview procedure in order to allow the participants to discuss what they choose. In this way, data are gathered according to the context derived by each individual participant (Flowers, Smith & Larkin, 2009).

Phenomenology is the study of experience (Flowers, Smith & Larkin, 2009). Although there are divergent views in the literature on how to study the phenomenological experience on what it is like to be human and how we construct experiences within the world. One of the primary founders of the phenomenological movement and the philosophical underpinning of this work is Jean Paul Sartre. Sartre argued for *existential* phenomenology where the person exists to experience the developments going on in the world around them. Sartre posits that we are “always becoming ourselves” and refutes the notion that humans are pre-existent beings just waiting to be discovered. Rather, we are in a constant relationship with the world and are involved in the constant process of the unfolding of ourselves based upon what goes on around us. Sartre believes that humans are more about becoming rather than being and in that sense each person has the right to choose their own actions and reactions to experiences. Considering the study of women who use drugs and seek treatment, Sartre’s work complements the view of this researcher that life experience and the world around us shape who we choose to become and what we choose to do in our lives (Smith, Flowers, & Larkin, 2009).

Another major theoretical foundation of interpretive phenomenological analysis is hermeneutics. Within this foundation is the *hermeneutic circle* which involves the relationship between parts and the whole of any given something. In other words, to make sense of a part, there must first be a look at the whole; and to understand the whole you look to the parts. The hermeneutic circle is especially effective when describing the method of interpretive phenomenological analysis. Using the hermeneutic circle, therefore, becomes an iterative process and an ongoing back and forth movement

throughout the analysis process. This method emphasizes viewing the data in many different ways, continually moving from the whole to the parts and back again in order to come up with a solid analysis of what has been found. In addition, this emphasizes looking at individual cases and then looking across cases for similarities in the experience (Flowers, Smith & Larkin, 2009).

Procedures

Human Subjects Protection

Approval to conduct this study was granted by the Institutional Review Board at the University of Wisconsin – Milwaukee. Approval to recruit and study women from the chosen methadone clinic was granted by the clinic’s director. The notifications of approval are found in Appendix A.

Setting

The participants for this study were recruited from an outpatient methadone treatment clinic in an urban city in Texas. Purposive sampling was used with researcher judgment to select participants with similar characteristics. The clinic is licensed by the Texas Department of State Health and accredited nationally by the Commission on Accreditation of Rehabilitation Facilities. The clinic accepts patients age eighteen and older with either private insurance, public assistance in the form of Medicaid or payment by cash. Patients must be using opioids for at least twelve months prior to being accepted for treatment and be diagnosed as having opioid dependence using DSM criteria (at the time of data collection, DSM-4). The methadone clinic combines methadone administration with regular counseling and appointments with the medical

doctor as part of the comprehensive treatment plan. The clinic did not use any form of contingency management.

The patients served by this clinic are not court-mandated into treatment, although this does not exclude patients who have had drug-related encounters with the criminal justice or child welfare systems. The clinic was chosen based on their large percentage of female patients (greater than 40% according to the clinic's director) and also because of the proximity to my place of employment as to allow me more availability to arrange interviews according to the preferred time of the participants.

Upon entering the clinic for the first time, patients meet with an intake counselor. Intake counselors are employees of the methadone clinic who are certified in substance abuse counseling. Intake can be done by appointment or on a walk-in basis. Once their eligibility requirements are met, including the diagnosis of opioid dependence and their ability to pay for the intake and treatment which is determined by the counselor, an initial plan of care is established with the clinic's medical staff that prescribes the methadone treatment and determines the initial dosage. Most of the time new enrollees are given a dose of methadone on their first day at the clinic. Because the initial intake process takes several hours to complete, women for this study were interviewed after at least their second day of treatment.

Sample

Women for this study were recruited from referral by the clinic's employed intake counselors and by flyers placed in the waiting room. Women were asked to contact me directly by phone if they were within their first week of methadone treatment. Using this time frame is found to capture the rich stories and emotions of women who have made

the recent decision to seek methadone treatment. The recruitment flyer contained information about the study and who to contact if they were interested. A copy of the recruitment flyer is in Appendix B.

Eligibility for this study matched eligibility requirements for admission to the clinic's treatment program. The participant has to be eighteen years of age or older and have been diagnosed as physiologically opioid dependent by the American Psychological Association Diagnostic and Statistical Manual, version IV (DSM-IV) criteria for at least twelve months preceding entry into treatment. This diagnosis was made by the clinic counselors and not by the investigator. Participants were dependent on heroin, prescription opioids, street opioids or a combination of the three. For this study, participants were all able to read and speak the English language.

After reviewing the study information and agreeing to participate, I scheduled the interview for a time convenient for the participant. All interviews took place on-site at the methadone clinic in a closed-door office setting although the participants were given the option of meeting outside of the clinic as well.

Early on in this study it became apparent that many of the women who agreed to participate did not show up for their scheduled appointments. After this was discovered, reminder phone calls and text messages were used the day prior to and the day of the appointment. The reminder phone calls did not significantly improve the recruitment rate. Of nineteen women who contacted the researcher and scheduled an appointment on the day and time of their choosing, only thirteen (68.4%) actually arrived for the scheduled interview.

The study began with the researcher presenting the women with study information, including the aims of the study and study procedures. A copy of the study information document is found in Appendix C. The study information given to each potential participant summarized the key points of the study to increase their understanding of the study purpose. Women were assured that their participation would remain strictly confidential and that they could take a break or stop the interview at any time without negative consequences. They were assured that their participation in the interview would not influence their methadone treatment plan in any way. To diminish any perception of coercion and to augment their comfort, participants were asked to take their daily methadone dose before engaging in the interview.

Women were given a thirty dollar Wal-Mart gift card upon completion of the interview as compensation for their time. One-hundred percent of the thirteen participants completed the interview in its entirety and did not end the interview prematurely.

Feasibility: Pilot Testing

Prior to this work, I conducted a small, unpublished *quantitative* pilot study within a comparable population of drug users at a methadone maintenance clinic in the urban Midwest in order to gain a better understanding of the methadone population. The major aim of the pilot was to investigate the ease of access into the population being studied and, at the time, and whether a quantitative survey methodology was the best approach to studying the characteristics of the population and the access to the group. The secondary goal was to explore the readiness to change among a population of drug users. The study was approved by the Institutional Review Board at the University of

Wisconsin in Milwaukee, and I gained permission to study the population from the clinic's regional director. The pilot study included both male and female participants with the aim of identifying the characteristics of the population in treatment as well as to test the response rate to the questions and determine the feasibility for using the site. Participants were administered the 32-item University of Rhode Island Change Assessment (URICA) (Field, et al., 2009) and demographic and drug use pattern data were collected. The URICA is a validated quantitative instrument that measured the stages of change of the Transtheoretical Model proposed by Prochaska and DiClemente (2003). The responses on this measure suggest if the participant is in the precontemplation stage (where the participant denies they have a problem), contemplation stage (where a problem has been identified and the participant is thinking about change), action stage (where the participant is actively working on the problem) or maintenance stage (where change has already been done and the participant is working to maintain positive change) (DiClemente, 2003; Field, Adinoff, Harris, Ball, & Carroll, 2009; Nidecker, DiClemente, Bennett, & Bellack, 2008).

The results of this preliminary study identified that access to the population and participants' willingness to participate was not problematic. The response rate for the survey was 100%.

A total of twelve people participated in the pilot study. The age of the subjects ranged from 21 to 48 years with a mean age of 30.92 (SD = 9.35). There were 8 (66.7%) male and 4 (33.3%) female participants, all of whom were unmarried (100%). Ten (83.3%) of the subjects were white, 1 (8.3%) was an American Indian and 1 (8.3%) was Hispanic/Puerto Rican. Nine (75.5%) reported having a chronic and troubling medical

problem and 3 (25%) denied medical problems. Five (41.1%) reported a troubling psychiatric problem whereas 7 (58.3%) denied psychiatric distress. 2 (16.7%) reported a history of physical or mental trauma and 7 (58.3%) did not. All (100%) of the participants reported graduating from high school. Five participants (41.7%) reported heroin as the drug which caused the most problems for them, and 7 (58.3%) reported prescription opiates as being the most problematic. The mean age for onset of opioid use was 20.33 years with a range of 12 to 46 years. Seven (58.3%) of the subjects reported receiving the drug for free when they first started using. The average time in treatment for all participants was 131.5 days with a range of 1 to 600 days. All (100%) of the subjects were current cigarette smokers.

For the total sample, the mean Readiness to Change/Stage of Change score was 11.95 (SD = 1.18) with a range of 10.15 to 13.71, meaning six (50%) of the participants fell within the contemplation stage and six (50%) within the action stage. Pearson correlations obtained between Readiness to Change score and medical and psychiatric problems showed no significant relationship. Likewise, correlations obtained between gender and stage of change was not significant in this small sample.

Despite the lack of a significant correlation between health status and Readiness to Change as well as an insignificant correlation between gender and change, important descriptive information on a small population of in-treatment opioid users was obtained and provided useful information on the feasibility of a study measuring this often stigmatized population and with the use of sensitive questions such as questions about trauma and relationships. Inspection of the findings revealed that access to the population and procedural issues were not problematic.

Data Collection Procedures

The methodology of this study involves one-on-one interviewing with an interpretive phenomenological analytical approach to gather and examine narrative accounts given by women new to methadone maintenance treatment. A cross-sectional design was chosen using one-time interviews because the aim of the study was to investigate the recent decision to enter methadone treatment and treatment experience so far, and not the longitudinal experience of being in treatment.

Women were asked to sign an informed consent document prior to engaging in the interview. This included an acknowledgment of their permission to tape-record the interview. The informed consent document is found in Appendix D.

Interviews took place at the methadone clinic in an office space separate from the dispensing area with the door closed for privacy. Interviews were tape-recorded using a digital tape recorder that generated an electronic file. Interviews lasted between thirty minutes to just over an hour.

The women were asked to first describe their history of drug use and then to describe why they chose methadone treatment. The interviews were semi-structured, meaning that there was minimal guidance by me. The women were asked to freely describe their experiences, first with drug use and then with their experiences with choosing methadone. The participants were encouraged to guide the discussion. Women were occasionally probed to elaborate on their responses in order to gain a deeper

understanding of their responses. Each participant has been given a pseudonym for data analysis and discussion.

Probing questions were used minimally during the interviews but it is important to note their purpose in a qualitative study. Probing questions can serve a variety of purposes (Ritchie & Lewis, 2003). When probing, content mapping questions were employed first, and then content mining questions. The questions in the probing arsenal are included in Table 1. Content *mapping* questions are used to “open up” a topic. Content-mapping includes ground-mapping, dimension-mapping and perspective-widening. Ground-mapping questions are usually framed broadly to allow the participant to spontaneously bring up issues that are important to them. Dimension-mapping questions are used to focus the participant a bit more narrowly on a particular topic. Sometimes dimension mapping is used to ask the participant to explain something in chronological order, such as “what happened next?” Finally, perspective-widening questions may be used to invite the participant to consider topics which the researcher hopes to have explored to ensure complete coverage of the topic. Perspective-widening questions were used sparingly, if at all, to avoid risking discussion of a topic that is not relevant to the participant (Ritchie & Lewis, 2003).

Content *mining* questions were used to amplify, explore, explain or clarify the participant’s responses as needed. Amplification probes encourage the participant to elaborate further and are generally used until the researcher is satisfied that there is nothing else to add. Exploratory probes are used to emphasize the meaning of experiences for the participant. Explanatory probes ask the question *why* and are usually used to elicit thoughts about feelings, behaviors and decisions (it is presumed that the

exploratory and explanatory probes will be especially useful to this study). Clarifying probes were used whenever there was a need to clarify terms and language as well as to clarify details and sequences. Occasionally clarifying probes can be used to challenge inconsistencies, although this should be done sparingly and only when it is obvious that inconsistencies are present and therefore this type of probe will be limited in this study (Ritchie & Lewis, 2003). Example probing questions are presented in Appendix E.

After ten interviews, data saturation began to occur. Saturation occurs when little new information can be added with additional participants (Polit & Beck). Although data saturation became apparent, three additional participants were interviewed for a total of thirteen—one of the women had recent given birth to twins while on methadone and I believed that her story would add important data, and the other two women were very interested in having their voice heard and so they were included as well.

I transcribed the files verbatim from the electronic voice recorder using my personal home computer. After transcribing, the audio files were erased from the digital recorder. Verbal responses were validated by comparison with notes taken during the interviews.

After the first three interviews, I met with the clinic director to discuss my preliminary findings and the plan for the remainder of the study. During this time he confirmed the initial findings as accurate accounts of the participant's drug and treatment history. We discussed recruitment issues and the director confirmed that the women at the clinic may have trouble remembering to keep appointments. He described the patients as being in a realm of chaos, and often early-on in treatment direct their efforts

toward “themselves and not others”. We met again at the end of data collection to discuss the cumulative findings.

Qualitative Data Analysis

Interpretive phenomenological analysis (IPA) was used as the general approach to this study, including the analysis phase. IPA assumes a large degree of researcher interpretation and stresses that the data be viewed in “its own terms” rather than being fit into predefined categories (Flowers, Smith and Larkin, 2009). IPA assumes an *idiographic* stance, placing the participants within their own contexts and starting with a close and thorough examination of each individual case before moving on to the next and before generalizing about the group. IPA also has the property of *idiographic sensibility* which is the detailed analysis of particular instances of a lived experience (phenomenon). Most importantly, IPA considers both the data not only for shared themes but for the distinctive and unique voices of each individual participant.

The data were analyzed following the interpretive phenomenological process outlined by Flowers, Smith and Larkin (2009). This iterative process involves eight general steps, although the ordering of the steps is not necessarily linear. Because of the dynamic and iterative nature of this type of analysis, an outline of the actual steps taken in the analysis of this particular work will follow.

The common steps of Interpretive Phenomenological Analysis are outlined in the following figure:

Figure 1: *Eight Steps of Interpretive Phenomenological Analysis*

- An in-depth, line-by-line reading and re-reading of each interview, initially not noting anything but simply reading
- Initial noting of all items of interest within each case. This step helps the researcher to gain a greater familiarity with the data by commenting on anything of importance. This can be salient information on relationships, processes, places, events, values, contraindications and even interesting linguistics used by the participant. This open-coding method helps the researcher to describe the overall content of each interview. It allows for annotation on conceptual pieces within the interview. It is perhaps this step that most involves the researcher in the process of engaging with the data as it encourages reflexive commentary and interpretation of the data.
- Developing emergent themes from initial noting creates a concise statement of what is important in each piece of the transcript. Using exploratory commentary, the researcher assigns a succinct theme to the piece of data. The hermeneutic circle becomes very important in this step, as each theme should represent the relationship of the whole to the parts and vice-versa.
- Searching for connections across each of the themes within each individual case creates initial “master” or “super-ordinate” themes which connect similar subthemes within each case.
- The first four steps are completed for each individual case before moving on to the next case.
- Patterns across cases are explored. This most often involves listing each theme and then looking across them for similarities and patterns. In this step, the most common themes are listed as well as themes that may help to illuminate the individual or collective group of cases.
- Following this step, a group of super-ordinate and subthemes emerge from the group.
- Final write-up of each case is presented.

This work began with the researcher listening to the voices of each woman on the tape-recorded interviews. This was followed immediately by reading and re-reading each individual interview at least twice in order to gain a solid understanding of the responses of each woman. In this step, particular attention was given to the temporal ordering of events when each woman was asked about her drug use history and to how each woman chose to tell her individual story. There was no writing or notation done during this initial process.

Next, preliminary and open coding began. Transcripts were printed in hard-copy format with two-inch margins left and right. Each line of transcription was numbered automatically using Microsoft Word. Anything of interest said by the participant was commented on. Attention was paid here to the use of language to describe different drugs, their effects, the experience of drug abuse and the experience of treatment. Attention was also given to how each woman described her decision to enter treatment and how that was introduced into her story. This step was quite reflexive, as my own thoughts about the participant's responses fueled more investigation into each story.

Next, each section of commentary on salient statements was assigned a concisely-named theme to represent its content. The above steps were completed for each of the thirteen narrative cases.

Next, a typed list of each theme from all thirteen cases was created using a different colored font for each participant case. Using the alphabetization in ascending order feature of the word processing program, the themes were ordered. This method allowed the researcher to visualize the number of participants who endorsed each theme and look for the most commonly-reported themes across cases. Also in doing this, it

allowed me to see that many of the themes overlapped in terms of similarity. During this step, the initial forty-five themes were condensed into seventeen themes. By reviewing the relationship between remaining subthemes, considering the research question for the study, and considering the existent literature, two final super-ordinate themes were created. A visual representation of this process is found in table 1.

In order to gain a more personal and in-depth relationship with the participant data, I transcribed, read, organized and analyzed all of the data manually. As one of the most fundamental parts of the IPA method, engagement of the researcher during this process aids in a deeper understanding of the study data.

Methodological Rigor

It is important in qualitative research to ensure that the study is credible and trustworthy (Smith, Flowers and Larkin, 2009). A number of guidelines for assessing this quality look toward establishing credibility. Psychologist Lucy Yardley's work in 2000 provides the principles for assessing the quality of qualitative research and how the interpretive phenomenological method can address them. First, the study must provide good *sensitivity to context*. In this study, the immersion in the clinic through field experience, the existing literature on opioid use and treatment, and the material obtained from the participants have contributed to building the context of the work. Awareness of the interview process, empathy, active listening, and providing comfort to the participants have been used (Smith et al., 2009).

Yardley's second broad principle is *commitment*. Commitment comes from the degree of attentiveness to the participant during the interview, the thoughtfulness of the work, and the completeness of the analysis undertaken. As described, the analysis needs

to be conducted systematically and also be sufficiently interpretative- rather than simply describing, the analysis must also be interpretive and reflective (Smith et al., 2009).

During this study, I immersed myself in the literature and in the setting as well as with the participant during her interview. During the interview phase, particular attention was paid to the language, gestures and emotions of each participant.

The third broad principle is *transparency* and how clearly the stages of the study are presented to the reader. This principle suggests a careful description of how the participants were selected, how the interview was conducted and the steps used to analyze the data. Also the study must provide cohesiveness, and the themes need to mesh together logically. With this, the foundational steps of the IPA method need to be clearly demonstrated (Smith et al., 2009). In this study, each stage of the study is defined for the reader. This will allow another researcher to replicate the study if desired.

Yarley's fourth principle, *impact and importance*, relates to the study's ability to tell the researcher something interesting, important or useful" (Smith et al., 2009). With the topic of opioid use and its far-reaching impact, the findings of the study are important to understanding our society.

Methodological Limitations

This study did have some methodological limitations. Primarily, the recruitment strategy used self-referral and this may have impacted number of women who showed up for their appointments, as even those who were successfully recruited and scheduled an interview appointment did not always show up for their chose appointment. If a participant did not show up, one reminder phone call was made. If the participant did not answer or call me back, there was no additional follow-up. The decision was made to

limit the reminder phone calls to one because of the belief that the woman decided not to participate or had dropped out of treatment.

Further, this study may have been limited by the use of self-report data about a potentially sensitive topic. The qualitative approach relies on self-report; however using qualitative methods to research an activity with potential legal implications may complicate the findings. When researching any issue that involves illicit activity such as drug use, it is extremely important to understand how this may impact the response to the study questions, or participation in the research altogether (Tourangeau & Yan, 2007). Using direct communication (either by surveys such as in quantitative work or through interviews or observations as in qualitative work), the researcher simply asks the participant for information. Whichever research paradigm, the question surrounding self-reporting is whether or not the subject is responding accurately and truthfully (Polit & Beck, 2008). In terms of a drug-using population, the subject may be engaging in illegal activity and may not use full disclosure when answering study questions for fear of being punished. In this study, the researcher gained the sense that the participant was being honest and truthful in their responses because the interview was directed mostly by the participant and she was able to choose her own responses.

Sensitive Questions

Tourangeau and Yan (2007) attribute much of the underreporting of drug-related experiences to the notion of sensitive questions. In their review of the literature, thirty to seventy percent of subjects underreport drug use compared with results of urine or hair drug testing. They consider questions about illegal activity, drug use, sexual behaviors, political opinions and income to be sensitive topics. The issue of sensitive questions

applies to both quantitative and qualitative research methods. Specific to drug use behaviors, subjects may perceive the questions as intrusive, and fear that the researcher will disclose to the authorities that the subject has involved themselves in illegal activity.

In addition, subjects may choose to answer a question based on what is most socially desirable. The concept of social desirability represents the subject's response being congruent with what society defines as good or normal, and drug abuse has been defined in our society as neither good nor normal. According to Tourangeau and Yan, many researchers in the field of psychology view striving for social desirability as a personality trait (Tourangeau & Yan, 2007) This notion is especially important to consider when studying those dependent on drugs.

Tourangeau and Yan also conclude the route of administration of study questions may also address sensitive questions and enhance accurate reporting. During the qualitative interview transcription and analysis, careful decisions were made if the participant disclosed the names or identifying information of other people if they would serve to identify the participant or otherwise breach confidentiality. Although this occurred rarely during the interviews, pseudonym names were used for the other people as well.

Ethical Considerations

The primary ethical consideration for this study was confidentiality and the assurance that the opioid replacement treatment plan of the participant would not be altered as a result of participation in this study. It was also important to consider the ethical implications of asking potentially sensitive questions regarding drug use patterns, legal implications of drug use and history of physical or mental abuse. Particular attention

was given to build a trusting and open rapport with the participants in order to ease this potential concern. In addition, the Institutional Review Board was assured that that the data would remain confidential.

As Tourangeau and colleagues and Perlis and colleagues (2004) report, illegal drug use is a much stigmatized behavior, and researchers need to understand that some level of underreporting is unavoidable in both qualitative and quantitative studies. Even through careful procedures to guarantee confidentiality, low levels of risk and understanding that there would be no punishments for reporting drug use, Perlis and associates found that self-administered questionnaires yielded higher levels of accurate reporting and disclosure of sensitive information. In 2004 these researchers published a study of drug use behaviors among subjects enrolled in a methadone maintenance therapy program. They report that out of 111 comparisons of questions asked either face-to-face or via computerized self-administration, there were twenty three statistically significant differences demonstrating underreporting of face-to-face items among this population. Although the authors report several limitations, including the fact that participants taken from a population of treatment-seeking methadone patients may have the problem of social desirability in the subjects' response to the questions. That is, responding with answers that are socially correct (Perlis, Friedman, Arasteh, & Turner, 2004).

Summary

The findings from this study are contained in the following two chapters. I believe that it is important to describe each woman's demographic data and background prior to presenting the findings from their interviews. Chapter four provides a description of each of the thirteen participants to inform the reader through their narrative accounts.

Chapter five presents the findings from the individual interviews and chapter six with a discussion of the findings.

Chapter 4

Summary of the Participants

What are the characteristics of a woman entering methadone treatment for opioid use disorder? One might think of a socially marginalized woman with little to no family support, young, unemployed, manipulative and difficult (McMurphy et al., 2006). Each of the women in this study presented with varying backgrounds but all with the common goal of recovering from opioid use.

A total of thirteen women were interviewed individually for this study. The age range for participants was nineteen to sixty-four years with a median age of twenty-nine years. The number of years of drug varied widely from one to thirty-nine years. Three of the thirteen women identified themselves as black; the remaining ten identified themselves as white. All thirteen women had graduated from high school or obtained their GED. Three women attended some college; one of them completed a four-year college degree. One woman was currently employed, the remaining twelve are unemployed. Five women have children under the age of eighteen; two of the women have adult children. One woman gave birth to twins six weeks prior to the interview, one woman gave birth four weeks prior to the interview, and one woman was currently pregnant at the time of the interview. Seven of the thirteen women had been in drug treatment previously, and each of those seven had been in treatment with methadone in the past. For the remaining six women this was their first time in treatment. Table 1 presents a summary of the participant characteristics. Pseudonyms have been assigned to protect the privacy of the women. The summaries describe a brief history of their drug use, family background and social experience.

Table 1: Characteristics of the Sample

<i>Name</i>	<i>Current Age</i>	<i>Age at First Use</i>	<i>Drug of Choice</i>	<i>Employment</i>	<i>Number of Times in Treatment</i>	<i>Number of Children</i>
Anna	19	18	Pills	Employed	1	0
Beth	24	13	Heroin	Unemployed	1	0
Elaine	64	62	Pills	Retired	1	2 adult
Aubrey	29	16	Heroin, pills	Unemployed	4	5 < 18
Mary	55	16	Heroin	Unemployed	>4	2 adult
Diane	29	14	Heroin	Unemployed	6	0
Faith	39	24	Heroin	Unemployed	2	0
Lisa	29	15	Heroin	Unemployed	>5	1 <18
Nicki	29	19	Pills	Unemployed	1	4 <18
Jenny	35	19	Pills	Unemployed	3	3 < 18 and pregnant
Carol	21	19	Heroin, pills	Unemployed	1	0
Keesha	34	18	Pills	Unemployed	1	2 <18
Holly	34	13	Heroin, pills	Unemployed	>4	0

Anna

Anna, age nineteen, was interviewed on her second day at the clinic. This was her first encounter with drug treatment. Anna lived with her husband, identified herself as white, and had completed some college, although she had recently dropped out. She described her drug of choice as “pills” and this is the only drug she has ever used. She described how she became involved with pain pills as a college student and how easy it was to access them. She described how she experienced positive feelings from illegal pain pills initially and how the effects of the pain pills strengthened her abilities in school. She then described how her drug use quickly grew out of hand as she became dependent on pills, needing more and more pills to achieve desirable effects. She

remembers her mother being a drug addict and being exposed to prescription pain pills at a young age. Anna is currently employed full-time.

Beth

Beth was twenty-four. She identified herself as white. Her most recent drug of choice had been heroin, but she has used multiple different drugs and alcohol in the past. She had never been in methadone treatment. She described how while growing up drugs were always around her. Beth was living with her fiancée and unemployed at the time of her interview but states that she had been working as a paramedic before coming to treatment. She had no children. She talked about how drugs in her environment influenced her to try many different substances at a young age. She described how influences within her family and her neighborhood as an adolescent led her to drug use. For Beth, it seemed like drugs were all around her and every facet of her life from childhood through adulthood somehow involved drugs. She remembered her mother and father being drug users; her two brothers both used and sold drugs; her current fiancée had been through drug treatment.

Elaine

For Elaine, an older black woman of sixty-four, her drug use began as a prescription for medication to treat back pain. She described feeling vulnerable about needing medication to treat her pain at first. She described how this quickly developed into a tolerance and need to get pain pills all the time. She spoke of how her pain pill use began as a “joke” among friends and family but rapidly spiraled out of control. She recalled the lowest point in her addiction history was when she started taking prescription

pain medication from her terminally ill husband's supply in order to prevent going through withdrawal when she was unable to get any more prescriptions herself. When he passed away from cancer, Elaine's supply ended. She had never used any other drugs before and had never been in treatment. She was brought into the methadone clinic by her adult son and daughter. Elaine is retired.

Aubrey

Aubrey was twenty-nine at the time of her interview. She was a mother of five who discussed her attraction to drugs as a teenager because of an older boyfriend who was using. She described how she was always sent to buy the drugs, even when she was eight months pregnant. Aubrey had been in treatment with methadone three times including this one. She had been incarcerated for drug-related crimes including theft and burglary. At the time of her interview, she only had custody of one of her children who was just four weeks old; Child Protective Services were involved with placement of two and the remaining two had been adopted. She was not working; she was a stay-at-home mother to her daughter and was married. Her most recent drug of choice had been heroin; she had also been on pain pills.

Mary

Mary was fifty-five at the time of the study. She was diagnosed with contracting the HIV virus twenty-five years ago and has been diagnosed with AIDS for the past five years. She admitted to contracting the virus through intravenous drug use. She was married to a "recovering alcoholic". Mary reported that her AIDS status was stable at the time, she was not currently experiencing any illnesses. She hadn't been working, but she

was helping her current husband to take care of his elderly parents who lived with them. She had adult children. She had most recently been using heroin and had been in and out of drug treatment at least four times. Mary described that she got involved in drugs because of her first husband, whom she married when she was just sixteen.

Diane

Diane, twenty-nine, described how heroin overcame her. Diane had a very long history of drug use but described her heroin addiction as the most powerful and difficult to overcome. She had used multiple other drugs in the past. She was not working. She has been in and out of treatment six times with methadone and for both inpatient and outpatient treatment. Diane spoke about heroin being a powerful drug that's use was difficult to control.

Holly

Holly, who was thirty-four, described how she began to experiment with drugs at a young age. Holly was married, without children, and unemployed. Her husband was in treatment at the clinic as well. Holly had been in and out of drug treatment for the past eleven years. She had tried inpatient and outpatient treatment and had been on methadone before.

Faith

Faith, thirty-nine, described her personal turmoil after the loss of her mother from AIDS in the 1990's. Having experienced this grief, she quickly turned to experimenting with drugs. She described an "I didn't care" attitude as she described her reckless behavior and sexual promiscuity while on drugs. She described the downward spiral of her addiction including the rapid descent from snorting drugs to using them

intravenously. She described her experience with methadone treatment in the past, and like Aubrey and Diane, described how, after she was clean, she felt that she was still susceptible to relapse. She was not working at the time of the study, but was planning a wedding with her fiancée who was working and who Faith described as being loving and financially stable. Faith identified herself as black. She reported her most recent drug use has been heroin but she had also used multiple other drugs in the past.

Lisa

Lisa, who was twenty-nine, unemployed, married and with one child for whom she did not have custody of, explained the influence of an older man on her initiation of drug use. She had been using heroin. She had been in and out of drug treatment since high school and reports that she was enrolled in special classes in high school for recovering addicts.

Nicki

Nicki, twenty-nine, white, and a mother of four, described her experience with an older, drug-using man. Nicki had two older children for whom she didn't have custody, and had recently given birth to twins while on methadone. She was not working but the father of her twins was supporting her. At the time of her interview, the twins were in foster care with Nicki's sister. She visited them frequently since they came out of the hospital. At the time of the study, Nicki stated that the twins were still receiving morphine liquid to prevent withdrawal. She related that as soon as she became pregnant she sought help for her pain pill addiction. Pain pills are the only drug she has ever used. She was referred to the methadone clinic by the mom and baby program at the local

hospital. She remembered her history of drug use, also involving the influence of an older man.

Jenny

Jenny was pregnant, about ten weeks at the time of the interview. She was thirty-five years old and identified herself as white. She had three other children who were not in her custody. She was not working. She was separated from her husband but was living with the father of this baby. Jenny said that she came to methadone treatment when she found out she was pregnant. She had been in treatment twice before with methadone, most recently in 2011 and prior to that in 2010. Her drug of choice had been pain pills. She remembered her history of drugs and how she felt as though she quickly “lost everything”.

Carol

Carol was twenty-one. She had a boyfriend who was in methadone treatment at the clinic and said that she came to the clinic because of him. She was not working but was planning to enroll in college in the fall. She didn't have any children. She and her boyfriend were living with his parents, but she was hoping to get a place of their own soon. She had used marijuana, cocaine, pain pills and heroin. This was her first time in drug treatment.

Keesha

Keesha was thirty-four years old. She was a college graduate who recalled that her drug use began when she worked at a gentleman's club to pay for school. She had two children who lived with her and she was a stay-at-home, single mom at the time of

her interview. She identified herself as black. Her drug of choice was prescription hydrocodone pills. This was her first time in drug treatment.

The detailed findings from the narratives of these women follow in the next chapter.

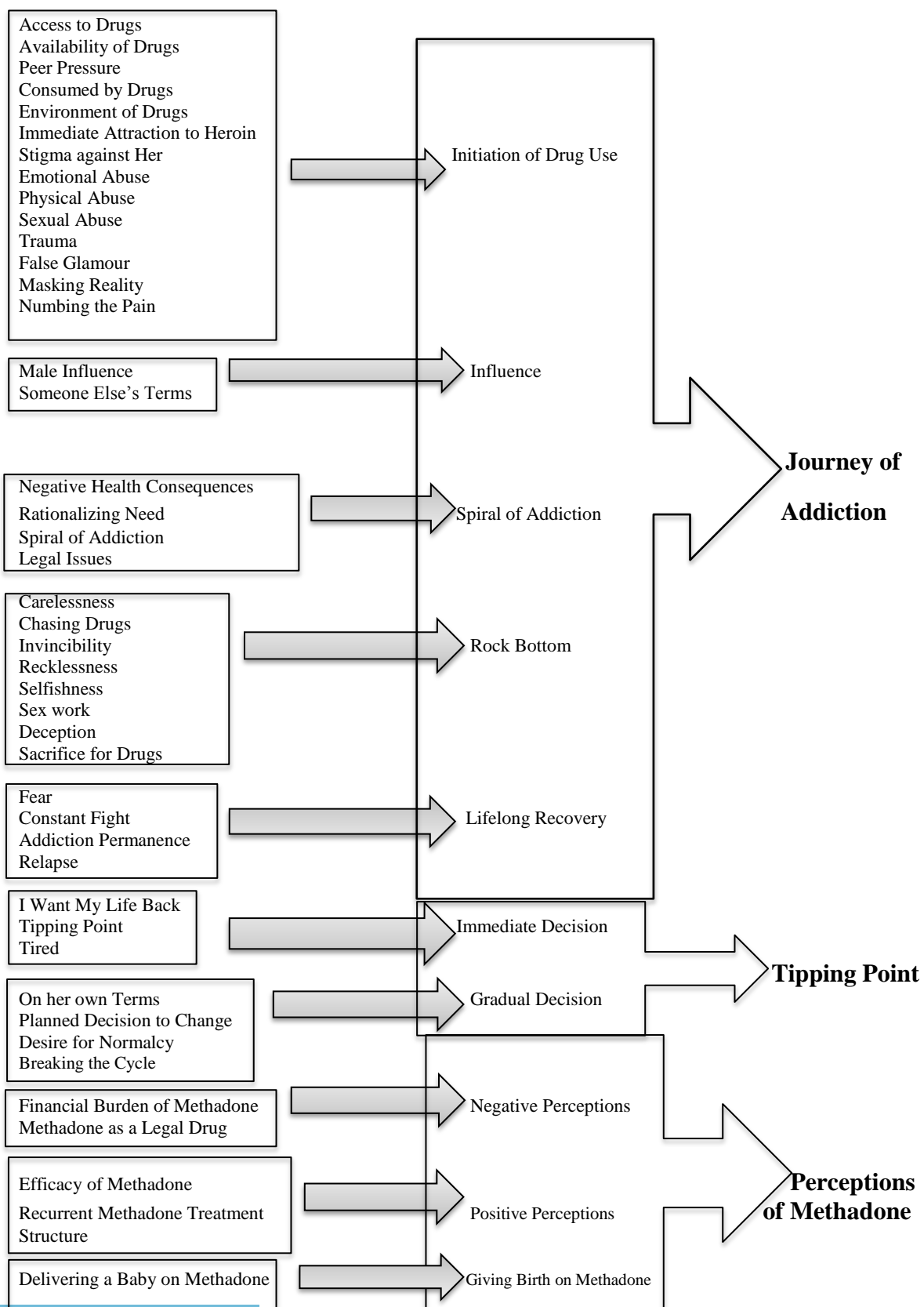
Chapter 5

Findings

This chapter presents findings from the individual interviews. Interviews were semi-structured, where the participant was encouraged to direct the conversation in whichever way she wanted while the researcher used probing questions and minimal input to guide the participant and ensure that the research aims were addressed. This resulted in the participant's own narrative of each response. The participants were first asked demographic information such as their age, drug of choice, employment status, the number of times they had been in treatment, and the number of children they had. To address the aims of the study, the women were then asked to describe their history of drug use. This was achieved by asking, "Tell me about your history of drug use, and go back as far as you can remember". Following that, they were asked to describe why they chose methadone by being asked "why methadone?" at this particular point in time by being asked "why now?" and what their attitudes toward methadone were by being asked to "tell me about how you feel about methadone".

From the narrative responses, initial themes were developed with open-coding of the data. Each individual transcript was analyzed for within case analysis and themes extracted. Following this, aggregate themes compiled based on analysis of the common themes between individual interview narratives. Three final major, or superordinate, themes developed from forty-five themes originally extracted from the individual interview narratives. Figure 2 represents the development of the major themes.

Figure 2: Development of Themes



The first major theme, the *Journey of Addiction*, concerns the participant's story of their history of drug use. Within this major theme lie the subthemes of *Initiation of Drug Use: Pain, Influence, the Spiral of Addiction, Rock Bottom and Lifelong Recovery*. The second major emergent theme is *The Tipping Point*; this is the period of time when the participants described their decision to get help. Within this major theme are the subthemes of *The Immediate Decision to Change* and *The Gradual Decision to Change*. The third major theme, *Perception of Methadone*, concerns the subthemes of *Positive Perceptions, Giving Birth on Methadone and Negative Perceptions of Methadone*. The following presents a series of representative excerpts from the participants.

Major Theme: The Journey of Addiction

In their responses to the question about their drug use history, the women described 1) how they became involved with drugs, 2) the drugs they have used and 3) their journey through drug use. During this part of the interview, the women were asked to explain their history of drug use and were encouraged to shape their own personal narrative of the experience.

The Initiation of Drug Use: Pain

All of the participants were able to recall a certain time period, age or moment in time when they started using drugs. Many of them began by experimenting with alcohol or marijuana. Very few of them tried heroin as their first drug.

Family stressors and peer pressure were common responses when the women described their initiation of drug use. For six of the women (46%), it was a relationship with an older man who also was using drugs that prompted them to try drugs or continue using drugs. All of the thirteen women described a form of *pain* as a reason for starting

to use opioids. Literally, some of the women were prescribed medication to treat physical ailments; and figuratively, some of the women described turmoil and personal pain as a driving force in trying drugs for the first time. The following selections describe some of those experiences. Faith talked about the emotional pain that she experienced when her mother passed away from AIDS,

My first usage was when my mom passed in 1997. I was getting ready to turn 24. When she died I wanted to die with her. Because that's all I had. I don't have brothers or sisters. And a so-called friend of mine's was dealing heroin and cocaine and she gave me my first use of both, heroin and cocaine mixed together. She mixed it up, chopped it up on a, I'll never forget this, she chopped it up on a cassette thing, music thing, anyway she told me to just (sniff) you know, snort like I'm snorting an inhaler thing, and I did that and it was the best high ever. I mean, I've been with plenty of men and it was like being with a man, you know, I actually climaxed type of thin, excuse me for being vulgar, but I fell in love with it. It took my pain away. It made me start loving life, you know, it was like "Oh God". So I used every day from that day forward. (Faith)

Influence

Sometimes it was the influence of an older man, often who was also using drugs and whom the women said they dated, that turned the women to trying drugs. Aubrey recalled a much older man who was already involved with drugs. She recalls,

When I turned 16, I met an older guy who was 15 years older than me and he was a drug dealer, he sold heroin, which at the time I had already done pain pills and I liked them. I had gotten him some Percocets, oxycodones, and um, the next day I am over at his house and he's like 'you wanna do a line?' and I just never liked the feeling of nothing up my nose but I did it anyways, cause it was him, and it turned out to be heroin. (Aubrey)

Like Aubrey, Mary had a strong male influence for trying drugs. She married and had her first child at a very young age. Her husband seemed more involved with drugs than he did with his family. She wanted to be a part of his world more than anything but when he chose drugs over his family she decided that she may as well start using drugs, too. She said,

I married to someone who was a heroin addict. And being the person that I am, I felt rejected. I wanted to be part of his world. I wanted to know what was so good about it that he couldn't leave it. Or choose me. I was 16 and married and we had a kid. I had a daughter at that time. What was so good about it that he chose it over us. So I had the attitude that if you can't beat 'em, join 'em. So that's how I started my heroin addiction. (Mary)

Some of the other women described being exposed to significant drug use when they were very young. A few of their descriptions follow.

I first tried acid when I was 13. I was with my grandmother and she passed when I was 13. So I was by myself, I bounced house to house. I started experimenting with drugs. That was the first drug, and then pot, and then I think cocaine, methamphetamines. It was always just, like, a party thing. I would do anything, no matter what it was. I would do anything to, I guess, kill the pain at the time.

(Holly)

Well when I, in, um, I guess the end of junior high, like me and my two friends or whatever pretty much, I was about age 15 I guess, started doing acid, water paper acid, and we were drinking and smoking pot and stuff like that, and I guess I dropped out of regular high school in 10th grade and went into an alternative school and I met a guy that lived out in Fort Worth, I lived in Arlington he lived in Fort Worth, and he did heroin and cocaine. And, I met him and started dating him and so that's how I got started doing that stuff. By the time I was 17 I was addicted to shooting heroin and when I was 17 I went to Brentwood Stair methadone clinic. I had my parents sign for me, so that was the first time I was on methadone. I detoxed off of that methadone at a place called Summer Sky, I was still 17. They detoxed me with intermuscular morphine shots twice a day and some other stuff, some benzos probably, so I got off methadone, ended up getting back on heroin, worked at the gentleman's clubs and stuff in Dallas, moved around, moved out to California and got really hooked on heroin out there real bad. (Lisa)

My mom was an addict. And I am pretty sure that she took pills when she was pregnant with me so I think I got addicted very quickly to them. And she would give them to me when I was like nine and ten years old so that, I think that helped me get addicted, too. She would give them to me when I had, like, a headache, like 'here you go'. With my family having addiction in it, I think, it made me have a stronger addiction mentally and physically. (Anna)

Beth described how she was literally surrounded by drugs at a young age. This led her to trying multiple drugs starting during adolescence. She said,

I was probably 13 or 14. I started using alcohol and then PCP and marijuana. I have used pain pills, cocaine, heroin and methamphetamine. A lot of methamphetamine, since I have three older brothers who were all dealers. The neighbors down the street, they would cook methamphetamine. There were always drugs around. In Oklahoma, the guy who lived catty-corner to us was a drug dealer and, um, cooking multiple drugs and so I would watch and feed his kids when they would come home and he would give me drugs for free. And then on top of that I was in a bad car wreck so I was in pain every day, they upped all of my medication, my hydrocodone, they started me on oxycontin. (Beth)

The Spiral of Addiction

When the participants were asked to talk about their history of drug use, this invited a chronological ordering of their initiation of drug use through the present time.

Many of the women described experimenting with drugs at a young age, some with multiple different drugs. Many of them described how drugs masked an often painful reality for them and almost all described the influence of someone else on their initiation of and ongoing drug use. As the women sequenced their drug use history, almost always their stories began with a positive tone, describing how drugs made them feel better. However, as their stories evolved the negative effects of drug use began to emerge.

In the beginning, some of the women spoke about the positive and rewarding feelings they had with opioids, such as Aubrey, who stated,

The feeling? You get like a warm, cozy happy feeling and everything seems just like perfect. I remember when I did it, it had my stomach, like, this feels so good, like I love this. I wanna feel this way for the rest of my life. The first time.

What ensued as the stories progressed was different, however. Without prompting or probing from the researcher, all thirteen of the women chose to talk about how the positive effects turned negative, some rather quickly. They spoke of how they felt that they needed opioids to feel normal, to prevent feeling withdrawal. They started to talk about being involved with the legal system because of drugs; they spoke of losing their friends, family and property. Some of the women had their children taken away. The mood of the women during this time changed into a more somber and negative tone. Some of the women cried. The women were all describing a downward spiral of addiction.

A few of the excerpts from the women describe this:

Just the way I got up every day needing it. I've never needed a drug, you know. I could wake up in the morning and it wasn't like 'coke, I gotta have coke', or weed, but with this it's like I need it [opiates] to feel stable, or to feel comfortable in my own skin. (Carol)

Elaine spoke of how her pain pill addiction began with her having back pain and a legitimate prescription for pain medication. However, her limited supply of her own pain pills and a mounting addiction to them led her to start taking pills from her ill husband. When describing her downward spiral of addiction, she recalled,

I started taking pain pills under the doctor and I just, uh, I was really in pain and I was taking more and more and I had a doctor that would just keep writing 'em for me and so I thought it was alright to take them, and I did. I always thought I just needed 'em, I'm in pain with my back, and people didn't understand and I really needed pain pills. My brain was telling me I was in pain so I thought it was in pain. My doctor was cutting me back, cause he's getting worried that it's been enough time now and I shouldn't be in as much pain, so I told the doctor "fine it was good" but I never let him know that I had another source which was my husband's, cause, you know, he didn't know my husband's situation. (Elaine)

Elaine said that she was always getting pain pills from her friends and family,

Somebody was always giving me pain pills. I never went out on the street and bought them illegally or anything cause there was always someone I knew. It was kinda' like a joke, you know, I'd tell my kids I could watch the grandbabies as long as they brought me pain pills, so I'd babysit a lot. But my husband, he was diagnosed with rectal cancer around that time, he started going through a lot of procedures. What he ended up with was a colostomy, so he started getting pain pills. So what happened to me, cause I was already taking them, he wouldn't take as many because he didn't need 'em and so I started taking his, and so the doctor was writing pain pills for him and I'd take 'em up. (Elaine)

Keesha was introduced to pain pills by a friend. Like Elaine, Keesha found pain relief with prescription opioids at first, but eventually she started needing the medication just to feel normal,

I was trying to get extra money and I started working at a strip club while I was going to college and I ended up, someone introduced me to pain pills illegally, cause my legs would always hurt as they do now and my back, and so I started taking the pills cause the lady told me that she knew something that would help me feel better. And I did feel better. I was able to work longer hours and I just felt brand-new. So eventually I ended up getting a legal prescription for the pills, cause I really started needing em. And that's the one thing that I learned that I don't like about hydrocodone. I started taking hydrocodone at the age of 27 and I

came here to get help at 33. In between all of that I've experimented with Ice, I've tried Ice maybe about 4 times in my whole life, I've smoked, shared three bowls and I had some to myself that I just put on my mouth above my gums, I've done it that way and also, yeah, the bowls and that way. The other thing I have tried in the club was I tried cocaine when I couldn't get to the pills I would try whatever else I could to try to get that feeling, well cocaine gave me a headache real bad but it didn't do nothing for me, I just got sick. So basically I ended up back taking the pills. (Keesha).

Faith described using pain pills without a legitimate prescription and how she, like Keesha, needed more and more pills just to feel normal. She described how her pain pill addiction transitioned into intravenous drug use, and then how her life began to spiral out of control and she just stopped caring. She said,

I went from 3 pills to 5 pills, then from 5 to 10 pills. I got all the way up to like 20 or 30 pills a day, and I'm talking about in a rig, in a cooker, you know cooking it up and then hitting myself. It was, it seemed like a month. It's like 'bam', one day I snort it and I loved it and then he introduced me to the syringe, and I give it a month, 30 days, and I became an IV user. And that's what my mom died from, from AIDS, and I didn't even care because all I wanted was that, that feel. And I fell in love with it. That quick. I fell in love with it. I did anything to get it. I sold my body, you know. Even after my boyfriend and I broke up because I stole from him, I was doing anything and everything to get my high. And I didn't care

who I harmed, who I hurt in the process. I took a lot of butt-whoppins', too, in the process of taking these people's drugs. I would go buy my dope after I sold my body cause that's how I bought my drugs. I was selling my body, prostituting... no, I didn't use protection that often. I just didn't care. (Faith)

Faith described a very low point in her addiction when she overdosed on intravenous drugs,

I overdosed once; I actually died in the field. They had to bring me back. I was DOD, yes, so that didn't stop me. As soon as they released me from the hospital I got high that same day. I didn't want to deal with reality, my mom's gone, I had nothing to live for. I wanted to die. And it's like when they brought me back I was angry, I was asking myself like why did they do this to me? I wanted to die, still. (Faith)

Like Faith, Jenny described how drugs caused her to lose control of her life. Just like Faith she said how she stopped caring about life. She recalled,

And I remember my sister coming to my house and bringing some meth, and she showed me how to smoke it, so when I smoked it it was a different kind of high. Um, I stopped caring about everything. I decided to give my baby to the dad and I gave him joint custody with him being primary home. But my thinking was I'm not doing right, I can't give this kid what he needs. As long as I still have rights

to him and I am in his life it'll be okay. And I'm doing drugs and I don't want him around that. I sacrificed 2 years of my life I did, you know, this that and the other, so it's time for me now. I lost everything. I mean, I started dating a guy that was no good for me, I lost my apartment, I mean, I was doing meth, I was smoking weed, anything and everything I could get my hands on. (Jenny)

Some of the women described trauma, physical and emotional abuse and personal turmoil during this downward spiral of addiction. The participants said that they felt drugs would always be there for them, would never leave them or betray them like friends and family did. For this, drugs seemed to mask their reality when reality was perceived to be painful or abnormal for them. Diane described this,

I guess I have been on heroin for about five years, and in that five, I have never felt so much turmoil and grief, and I have been doing drugs for 15. You know heroin, it's a monster it's something that's unleashed inside you that's very hard to tame. Heroin is something that I have not been able to beat. I guess it's something lacking inside me that's why I continue to use drugs. I guess drugs, you know, mask you. They put a blindfold over you so that you can't see that this lifestyle is extravagant, but it's not. (Diane)

Elaine recalled how she believed the stress of caring for her terminally ill husband was made easier when she was taking opioids,

My husband got sick with rectal cancer. And with my husband sick came the hospice. And the cancer, they had a big hole in his stomach and his bowels was coming up through his stomach to the point where I would have to take a syringe, and to take care of him I just felt like I needed the pain pills. They gave me a boost of energy, I could handle the situation, and I would make him feel like it was no big deal to take care of him. I could change the bed, there was so much to clean all the time... anyway the bowels couldn't make it to the bag anymore, so now for me to deal with all of that and still try to take care of him at home, and he was alright as long as I was there. And when I started having to suck the, the bowel with a syringe it was more than I could handle but as long as I was taking Oxycontin I could handle it. I couldn't have taken care of him without the pain pills. (Elaine)

Jenny described the allure of drugs because they were always around even when friends and family were not. She talked about how her drug use was harmful to her unborn babies,

And drugs, they're your best friend. They don't leave you. But I know that I have lost everything that's ever mattered to me because of it. And what's so sickening about this is that I ingested drugs while I was pregnant with my babies. I was getting my babies high. And that's sick. So I understand when people say "those kind of people", cause in anyone's right mind how could you? See, I don't get sick, it's just the lifestyle. And it's hard because I don't know where to begin

to forgive myself. So that's what I'm here to work on. God forgives me, and that just blows my mind. (Jenny)

For Anna, taking pain pills actually made her function better at school,

I was a retarded college student and in my head I was like 'this makes me study better, this makes me rope better' cause I was on a rodeo scholarship. And this makes me do everything better, so it... it was like five minutes from the border of Mexico and they're very easy access so I just kept taking em and before I knew it I was addicted. Well, um, I didn't realize I was addicted until I, um, like I said I wanted to take em every day cause, like, in my head it made me study and everything better. And then one night I just didn't, you know, buy anything, and I went through, like, horrible withdrawals and that's when I realized I was addicted. And by that point, the withdrawals scared the hell out of me, literally, so then I just kept taking em so I wouldn't have the withdrawals again and I guess I kept getting more and more addicted. (Anna)

The Rock Bottom

Some of the women described the lowest points during their addiction continuum. For these women, the addiction to opioids and the physical effects of withdrawal if the drugs were not available were profound. Other women described the financial impact of ongoing drug use, and others the legal implications of their use. This a representation of what five of the women experienced at some of the lowest points in their addiction:

It was miserable. You know, the sweats, the body aches, the, you know, the nose running, of my God, I can remember it like right now, I can feel it, talking about it. And I said to God, if you help me through this, I remember lying to God, telling him if he helped me through this I would not get high again. (Faith)

Aubrey told how she and her husband were homeless because all of their income went to buying drugs. Even though she was abstinent from drugs while she was incarcerated, she described how returning to the same environment after she was released caused her to relapse.

Me and my husband, we lived in my truck for about 3 years behind his job. And it was really hard. And then I went to prison. And when I came home I relapsed. It wasn't so much that I wanted to do it, it was the fact that I came home to the same place, to the same area, to the same people, and then I thought, you know, I don't have to work, you know so I'd stay home- and so idle time is the devil's playground, when you don't have anything to do but to sit around. (Aubrey)

Lisa described her last detoxification from opioids. She said that it was the worst experience so far with drug withdrawal.

This last time I detoxed at home, my husband was in jail for a month and I was at home, and that was the worst time by far. I really should have been hospitalized.

My knees, I couldn't walk, I couldn't eat. I tried alcohol that didn't help, nothing would help me sleep, nothing would help me get better, I was so sick for at least 2 weeks. I would get up, go take a shower, and my knees would shake so bad in the shower that it was like, I almost had to call my best friend to come over and help me shower. You know, the stomach stuff, it was by far the worst detox I've ever experienced. I don't know why I get off and on, off and on. Things have definitely changed between now and last time, I don't plan to stay on methadone for long. And, um, in fact I'm already gonna try to go back down so, um, last time I would get on methadone and just stay on it, this time I don't want to stay on it. I don't want to be responsible for paying for it and all that. I don't know why I get off and on, um, I guess it's because in the middle of a \$200 heroin habit, methadone looks pretty good. (Lisa)

Faith described serving a prison sentence related to drugs. But this wasn't enough to make her stop using. She recalled,

2001 I got locked up. Okay, for possession. It wasn't drugs, it was just some residue around a capsule, and it was enough to send me away for 5 years. I acted a fool. I spit on laws. I was just hateful. I didn't have to do the whole 5. When I came home in 2005 I went straight back, after 5 years of being clean, no drugs. I went right back to using. Because I felt like I was forced to stop. I felt like I wasn't done. They forced me to stop. (Faith).

Elaine remembered a significant withdrawal experience from pain pills as well,

One time I ran out of Vicodins. I was out driving home from a flea market, I went across town, and on my way home I couldn't hardly drive, I was going through withdrawals. I called my husband on the phone and I said whatever he do just have me one ready when I get through the door, I was that sick. (Elaine)

Some of the women were able to look back at their journey of drug use and compare their experience to their male counterparts who were also using. Mary described in her words the phenomenon of *telescoping* (Greenfield et al., 2010), where women are believed to spiral downward faster than men into significant problems with drug use,

You know, women go down faster than men. They tear up their bodies worse, we're sicker when we get off drugs than men are. I don't know what it is. I guess our bodies are made different. We're more sicker. The guys, they can eat and sleep and all that, and I don't like that. So I got to that point like I'm gonna get sick again. (Mary)

Lifelong Recovery

Entering methadone treatment is not the end of recovery for women. Despite the described positive effects of being in drug treatment, the concept of addiction recovery being an ongoing process was described by some of the participants. This relates to the

ongoing state of recovery, despite methadone treatment. Diane discusses that recovering addicts need to be forever aware of relapse triggers in their environment, the “people, places and things” (Diane) related to drug use.

I’m getting stable on my dose. I’m not using near- and, you know, it’s not even the fact that I need it, or that I’m getting sick still, it’s getting out of the routine, it’s people, places and things. You have to substitute for the bad things, and it’s difficult, you know. It’s a lifestyle that you’re used to, and you just gotta change it, you gotta want it, it’s a demon inside you that you fight every day. Just because I’m here at the methadone clinic and I’m trying to fight for my sobriety, doesn’t mean it’s gonna come easy, and so I fight it every day. I have triggers every day. It can be somebody says something on TV, or sometimes I can smell something and it just triggers me, and why a food or a smell would be associated with a drug I don’t know, but it does, you know. I don’t know, heroin has like a vinegar smell, so anytime I smell something with vinegar it triggers me. (Diane)

Even though women were on methadone to recover from addiction, they still struggled daily with fear of addiction as Aubrey explained,

Even though we’re on methadone we still have issues with addiction. I still have days where I wake up and I still wanna get high. I still have dreams where I still wanna get high, um, methadone doesn’t get me high, in the beginning you do feel a little something then you just feel normal. And I’m scared to death, you know,

what happens next, where do I go now? I think as an addict we're scared of the unknown. And with the methadone, that's not just gonna cure our addiction. We have to reach down inside of ourself and deal with our childhood. There's a reason we're getting high. We have to deal with all of those issues. I have to deal with the adoptions [of my kids], I have to deal with the rapes. Everything I have done I have to deal with that, and until I feel that I'm ready then I'm gonna... I don't know when that will be. You take it day by day. That's what you do... that's what you do.

Aubrey also said,

I was clean at one time. I ended up getting my wisdom teeth pulled, and even though I told the dentist I was an addict, he said 'well I'll just write for a few', and that was all it took. Then it turned into a pain pill addiction from heroin. It seemed like it was a lot easier to get, it seemed like it was more acceptable because a doctor was writing for it.

For the women who were in methadone treatment previously, sometimes relapse occurred because they returned to the people, places and things connected to their drug use. As Faith described,

[After I finished two years of methadone before], I put myself on a pedestal and that was the worst thing I could have done, cause I fell. I felt like I was better

than everybody and I went back around those people, places and things thinking that I could do that, and I couldn't. I'm not a kid but I wasn't told once you get clean you have to change your people, places and your things sometimes. I went back around the same people I was getting high with and I fell. I had money in my pocket, I was working for Motorola, and, I never forget, a guy friend I grew up with said I got some Fire as they call it, you're gonna like this, and- addict as I am- thought I could do just this one pill. And off to the races, here I go. I went back full force into my addiction, every day, here I go again. (Faith)

With this permanence of addiction, most of the women in this study had a difficult time answering questions about their future beyond methadone treatment. Diane represents this by saying,

I can't tell you what's gonna happen. I can't. I feel that as soon as I do that, as soon as I say I'm gonna be- something's gonna happen, so I want to take it right now. I did that my whole life, you know, trying to prepare for the future, and this is what my future has become. So I just want to take it right now. And I hate that I can't tell you what's gonna happen, but that's just me. I don't want to disappoint anymore.

Major Theme: The Tipping Point

As each participant told the story of her drug use history many of their narratives lead to a tipping point, the climacteric stage where their use turned into a need to seek recovery. During their interviews, a change in the mood of the participants was noticed.

Their stories built and built from a generally positive air to negative, and then toward the point at which they decided to get help. Most of the women entered this point in their narrative without prompting. Those who did not were asked, “Why now?”

Immediate Decision to Change

For some of the women it was a clear and discrete moment in time when they entered treatment. For Elaine it was not her choice,

But now when he died what happened was he had a little supply of pills left but I did took ‘em up, now I gots no more. I didn’t know what to do. My son and daughter, they saw me in the bed after I buried him about 3 days after I buried him I done took all his medicine. I went to the bed and couldn’t get up, I was sick as a dog. And my son got upset with me and he said ‘momma, this is enough. You’re going to the clinic’. I was hurting so bad I didn’t even care. I didn’t care. I was so sick I felt like I was the one dying...my son literally got me up out that bed, my daughter put a jogging suit on me and literally dragged me here. I didn’t want to be here, I was fussin’ and cussin’. (Elaine)

Anna described a significant and violent event where her life was threatened while trying to make a drug purchase,

I, um, had a gun held to my head. Trying to buy some pills. I couldn’t find anything for, like, hours and so I decided it would be a good idea to go into the

projects and, um, the guy was like, ‘yeah, I have some. Let me get in the car and take me around to my apartment and I’ll run in and get ‘em’ and then he went and got a gun and then got in the car and- he held the gun to my head over \$45. He, he thought I was the law. He thought I had more money than I did and when he realized I didn’t he let me go. I immediately called my husband and he was like, ‘well, that’s what you get’ kind of thing. Immediately I decided to get help. Like, the first thing I did when I got home was look up help, but with my work schedule I wasn’t able to get here and get started and be here for the five hours and see the doctor until recently. (Anna)

For Lisa, the significant even was severe physical illness during drug withdrawal,

This last time I detoxed at home, my husband was in jail for a month and I was at home, I had no money. And that as the worst time by far. I really should have been hospitalized. My knees, I couldn’t walk, I couldn’t eat. I tried alcohol and that didn’t help, nothing would help me sleep, nothing would help me get better, I was so sick for at least two weeks. I would get up, go take a shower, and my knees would shake so bad in the shower, I almost had to call my best friend to come over and help me shower. You know, the stomach stuff, it was by far the worst detox I’ve ever experienced. I decided it was this or nothing again. We’re tired. We’re tired of this. Even when we’re doing it [drugs] we’re tired of it, you know. We’re just like so... it’s not even fun anymore. (Lisa)

Gradual Decision to Change

For others, the decision to enter treatment was more gradual. There was no clear single moment in time described, but rather a contemplation about treatment over time. Women used the explicit statement, “I want my life back” when describing their reasons for change.

I want my life back, you know, this isn't what I saw for myself. If someone asked me 15 years ago where do you see yourself this isn't where I wanted to be- in a little office talking to you. Together we have five kids. I haven't been there, you know, and I want to- it's time... I'm tired... it's time. (Diane)

Like Diane, Faith described how she was ready to regain normalcy in a life without drugs. This was in part because of her new fiancée who was a positive influence on her recovery. She said that she had been contemplating methadone for a while but it was his guidance that led her into treatment again. She said,

And I know this program works, if you let it and allow it, and that's why I'm back again, cause I want my life back. I have somebody that loves me. He wants, he's so proud of me, he told me this morning, he started crying and make me cry, he said I am so happy for you, because I know, I see life in you, I never had no one in my life to love me like that besides my mom and she's gone (crying). I never had a man that wants what's best for me, it's always been by him. And he said you get up every morning when I'm getting up for work, we get up, like I don't

have a job but I'm getting up like I have a job. But this is my life. And each day is gonna get better, I know it is because I've been there before and it does. If you stay with this program you will succeed at whatever it is you wanna do. I wanna go to school and finish it. I don't wanna just go and then stop. I wanna go and finish whatever it is, and I'm going to, because there people here do care, they show compassion and they listen, you know, and that's why I chose methadone again. (Faith)

Major Theme: Perceptions of Methadone

After describing their histories of drug use and the eventual decision to enter treatment, the participants were asked to describe why they chose methadone as their treatment modality. Nine of the participants spoke of methadone treatment in an entirely positive light. Two of the women discussed both positive and negative feelings about methadone. Two of the women discussed methadone with entirely negative beliefs.

Positive Perceptions of Methadone

Some of the women who had experience with methadone treatment in the past easily explained the positive rewards of being in treatment.

Faith had been successful in methadone treatment in the past. She described how with the help of methadone treatment she was able to work and to better take care of her home and herself,

After all this time. And the only way I know is methadone. Cause when I'm on the methadone I do like a normal person, I'm ready to work, keep my house clean,

go to meetings, you know, it makes me.... I don't know if it's the methadone, it's gotta be the methadone cause it ain't me. I met the guy that I am with now. He said he cared enough, he had to wait until I got tired, and I was. I was gonna get tired. And I said to myself this guy has no clue. But I finally got tired. I can't wait to be able to feel, you know, relief, and I know it's coming. I want to be able, when I get to that certain point in my life, I want my life back. I am just now starting again. And I know that this program works, if you let it and allow it, that's why I'm back again, cause I want my life back. (Faith).

Anna described how the clinic hours for methadone dosing and counseling allowed her to attend treatment and work every day,

Um, I had tried to do it myself, tapering off, and it didn't work, and, um, the reason I chose methadone is because, um, I can't do it inpatient or anything because of work and methadone is very easy to do while still working. Well, not that it's easy but it's, um, it's convenient to do, not- I don't want to use the wrong word, but- um, you can still come here every day and get your treatment and still work a full-time job, still work 60 hours a week like I do-

Faith, who has been in methadone treatment before, said the support of the clinic staff was a strong factor in her recovery. She said,

This morning I was having it really rough because I'm just now in the beginning. But when I'm having it really hard I know there's people here I can talk to. Like this morning I didn't think I was ready to start, I put that façade up like I'm okay, but I'm not okay. I'm gonna go through that, I'm gonna be on that roller coaster for a week or two. (Faith)

Several of the women discussed their desire to be successful in the program to stay clean from drugs. Women such as Beth voiced their desire to be clean from drugs as a motivation to be successful with methadone treatment,

I feel like this is going to work. I want to be clean. It's how me and my husband, fiancé, have done it. If- he relapses on meth, it's over. If I relapse on meth, now, when I say meth that is our only, he smokes weed- I don't care if he smokes weed, it's not a big deal. One of my biological brother's, he is one of the head people of the people trying to legalize weed. I have no problem with weed, just don't do it in the house, you know cause my parents are there. We're at the point where the methadone treatment is messing with my Dilantin and gabapentin levels, um, so we are trying to get that all straightened out but if I know if I stop I know I am going to immediately turn around and go right back to drugs, which also messes with my seizures. I lost my job because I had a seizure on the job, and fell out of the back of the ambulance. And then I, um, there was other stuff, but that was one of the main reason. So I'm at the point where I need to do this to get clean. I had tried suboxone and Naltrexone but I was still getting high, I was

taking so many drugs and still getting high. I have never tried methadone before but this is it. This has to work. (Beth)

For Mary, it was her motivation to be clean and healthy,

So I got to that point like I'm gonna get sick again. Cause it's taken the last 2 years to get my T-cells back up to like 800. So, even though my mom's gone and I'm the only child. I still have an aunt, I have wonderful in-laws. That's okay that my purpose isn't no big, grand purpose. I just want a peaceful, non-chaotic life where I can get up every day and be happy that I woke up. (Mary)

Faith, who had prior experience with methadone treatment, described how she was looking forward to the positive effects of methadone and being clean,

If you stay with the program, you'll succeed at whatever you want to do. I wanna go to school and finish it. I know I'm in the beginning, but I know in a week I'm gonna be full of life again. And I'm already wanting to stay clean. I'm not forced. I'm not on probation or parole. But that's okay, too. I'm fighting. Every day is a fight. I realize that. I can't wait to be able to feel, you know, relief, and I know its coming. (Faith)

Keesha described how just after a few days in treatment she felt strongly that the treatment was already working for her. She said,

So when I came here and got on methadone, like 30 minutes later after I took that first dose I felt like this new person, I felt great, I felt good, I immediately started getting my life back. Methadone has been a blessing for me, and at this point in the beginning of taking methadone it feels great. I have had all this energy that you didn't have before. I am enjoying being clean and taking advantage of it, paying more attention to my kids. I was crying, I was happy that I could get my life back again. (Keesha)

Just as many of the women spoke positively about methadone for themselves, some of them were eager to promote the positive effects of methadone. Faith was happy to recommend methadone treatment to others,

The only way I know to get clean is this program. Because it's a guide, its guidance, it helps you to, to guide you type of thing. You're being watched, and I need that. I recommend this to anyone out there that's struggling out there using, cause these people, they really do care, they care to see you make it. (Faith)

Anna, who has never been in methadone treatment in the past, spoke of how excited she was to start in the program,

I wasn't scared, I was, I was excited, I was relieved. I had to be here at 5:30 and I was up at like 3:45, I couldn't sleep, cause I was excited that I was finally getting

the help that I needed. You can still come here every day and work a normal job like I do. I kind of [misconceptually] thought it was going to be just an immediate change to, just like, be immediately, completely off the pills, cause I'm still having to take like 3 or 4 at night until they get my dose right. And so I immediately thought it was just going to work, but I didn't realize that it's a process and it takes time. I am actually going to be able to live paycheck to paycheck now. Methadone is very easy to do while still working. I thought I might be able to get off of it soon, but from what the doctors and everyone are telling me it's gonna take about two years. I wasn't really prepared for that, but if that's the way to do it and be comfortable and everything, then I'm okay with that. (Anna)

Giving Birth While on Methadone

Three women were able to describe the experience of carrying a baby and giving birth while on methadone treatment in the past. They described methadone treatment as being helpful in keeping them off street drug while they were pregnant and so described methadone during that time as positive. Although there was some concern about the effect of methadone on their babies, the women were overall pleased that they were in the program. Nicki and Aubrey explained their experiences,

I didn't know anything about methadone and pregnancy. I just knew I had to get off the street and make a home for my child cause this would make my third child and I didn't have the other two and I wanted to be a mother, I wanted a life, I

wanted to change. I got into the program and honest to God it saved my life. It's very, very difficult when you have to have your baby on methadone, I was up to 330mg, because you don't know if your baby's gonna be born addicted to methadone. I've had friends who was on 50mg and their babies was addicted. I have been on 330 and by the grace of God mine are not addicted. And, that by itself, you're dealing with this sober, you can't run and go get high, you have to deal with it. It's really hard to give birth and then watch your baby just be taken from you and taken into the neonatal unit to see, you know, with needles in her and just watch to see if she's gonna have withdrawals. If the baby does come out addicted, it's a horrible scene just to know that you have to give a newborn baby methadone or morphine even though in the sense that's what we're doing when we're pregnant on this, but it's just a lot harder to watch. (Aubrey)

Even when I had my babies, when they gave me pain medicine, when they did my spinal tap they ended up having to give me more medicine during my C-section because it started wearing off. The babies are doing really good, they're really healthy, they're just detoxing. They were sent home with morphine. I wasn't aware of everything they was gonna go through. So I don't really recommend babies being born on methadone. But it happened, the reason why they put me on methadone is because for me detoxing would have caused me to miscarry. So the safest thing to do was to go ahead and take methadone. (Nicki)

Negative Perceptions of Methadone

For some of the women, despite deciding to start treatment, there were negative perceptions of methadone. The women describe how methadone is just a legal replacement for an illegal drug and that it is equally addicting and difficult to stop. For some of the women, the choice to start methadone was to ease the financial burden of buying drugs from the streets.

Lisa expressed a negative view of methadone treatment in general. She has been in treatment with methadone more than once, and described how she continued to relapse despite trying several different types of treatment. She was not happy with being in treatment, and she found it interesting that there was a study being done about women and methadone. She said,

I've always given him [my boyfriend] my speech about methadone and blah, blah, blah. I just think it's pretty funny that there's actually someone studying this. Because I for a while, I'd be in jail and they wouldn't be medicating me and I wanted to do something about this.

She went on to say,

This time I don't want to stay on it [methadone]. I don't want to be responsible for paying for it and all that. I guess it's because in the middle of a two-hundred dollar heroin habit methadone looks pretty good. So this time I'm gonna get on a small dose, level off, get a job then come off of it. I tell him [my boyfriend], this stuff is evil and it's a trap and it's a money maker and it's just, you know, I don't

really, I'm not really pro-methadone. I'm on it. I wish I wasn't. I don't plan on staying on it. Methadone treatment centers look like they are there to help you and save you, but at a humongous price they're gonna help you and save you. They don't tell you what big of a price you have to pay to be on methadone. Later on you're gonna be in serious pain and you don't know it. Nobody believes it until they go through it, so... (Lisa)

For Aubrey and Holly, it was not a dislike of methadone treatment, but rather there was a fear of coming off methadone, in particular because methadone is also an opioid. Aubrey explained,

And there's a big fear of what's gonna happen when I have to get off. Cause now I'm gonna be addicted to the methadone. So that's, I guess, that's my main concern with this program, switching from one drug to another. And it kinda makes me feel like the doctors and nurses here are the drug dealers and if you don't go by what they say you have to do, then you don't get your medicine. I guess they are more about the money than anything. And what choice do you have, really? It's like you go to this dope man or that dope man, it's kinda the same thing. And, um, after years of being on this you just get tired. You see it in some people. If you sit in the clinic long enough, you see people come in that are just tired. They are just tired of it. Eventually it gets that way with methadone, you are just tired of it. (Aubrey)

According to Holly,

Well, honestly it was, cause we were buying methadone off the streets already, this was a cheaper way to get high, honestly is what it is. And then I never thought about a program to get help. I wish they wouldn't have taken me. I don't know about treatment. I'm struggling with am I going to be on this forever.

Summary

Through the use of semi-structured, open interviews with thirteen unique women, it is discovered that there is a path, a journey, from their first use of drugs through addiction and then into a turn of events that led them into methadone treatment. Some of the participant's perceptions of methadone are positive while others are negative.

The aims of the study were addressed by responses from the participants involving how they experience drug use and treatment. This was achieved by describing their addiction journeys, their decision to seek help, and their attitudes toward treatment. Although each of the thirteen stories is unique, there are many commonalities among the participants in terms of how they experienced opioid addiction and their attitudes toward treatment with methadone. It can be concluded that the participants each described an intense journey of addiction from the onset of use through hitting rock bottom. All of the women described extrinsic motivators when recounting their initiation of drug use but most of them described intrinsic motivation when it came to deciding to get help. For most, there was a major tipping point when they decided to get help. For some this was a discrete, significant event but for others the decision was more gradual. Finally, it can be

concluded that there are both positive and negative attitudes towards methadone treatment among the participants.

Each of the women was invited to shape their own narrative of the experience of drug use and recovery. The following chapter describes the interrelatedness of their narratives using the Interpretive Phenomenological Analysis (IPA) method to critically examine the findings and relate them to the existing literature. Important considerations, implications for practice, research and policy and recommendations for future research are discussed.

Chapter 6

Discussion

Participation in this study gave women a platform to share their experiences with drug use and methadone treatment. The preceding was a reflection of their experiences and emotions of a phenomenon that encompassed their lives. Using the Interpretive Phenomenological Analysis qualitative research methodology, the narrative stories of participants were analyzed in a way that allowed the researcher to interpret and explain the findings. A discussion of the findings will be found in this chapter.

The literature to date has largely neglected to examine the narrative stories of women new to methadone treatment for opioid dependence. This study adds important descriptions about the opioid use trajectory among a group of thirteen women from initiation of drug use through their treatment experience and gives depth to what little we currently know about women as a unique population of treatment-seekers. It helps to fill the gap in the literature about how women experience using drugs, choosing methadone treatment and why they choose it at a certain point in their lives. This study gives voice to thirteen women who struggle with opioid addiction and treatment.

Although numerous quantitative studies exist on the number of women using drugs, needing and going into drug treatment, very few studies have given sufficient qualitative exploration of the narratives of individual women experiencing methadone. With hope, the findings of this study will provoke further interest in the lives of these women, and countless others like them across the US. It is only by raising awareness and informing ourselves that we can further help women to recover and increase awareness

about women and addiction. In qualitative studies such as this, women are not simply numbers to be counted; rather they are a voice and an experience.

All of the women interviewed for this study were very open to sharing their experience, whether positive or negative, about drug use and methadone. They freely described their initiation of drug use, the types of drugs they used and why, their experiences in treatment in the past and present and their expectations for drug treatment. Even though drug use is thought of as a potentially sensitive topic (Tourangeau and Yan, 2007), the participants were agreeable to discussing their drug use openly without much prompting from the researcher. Although there were thirteen unique narratives given by the women, there were major themes that emerged among them as a group.

The major themes extracted from the data are *The Journey of Addiction*, *The Tipping Point* and *Perceptions of Methadone*. All thirteen of the women endorsed one or all of the overarching themes in their narratives. *The Journey of Addiction* as a major theme concerns their *initiation of drug use, influence, the spiral of addiction, rock bottom and lifelong recovery*. All thirteen of the women endorsed some form of vulnerability to addiction, whether it is environmental (extrinsic) influences or personal motivators to try drugs (intrinsic factors). The first subtheme within this major theme, *the initiation of drug use: pain*, concerns how the women describe falling into the web of drug use. This theme describes the pain and sometimes trauma that triggered each of the women to start using drugs. The subtheme of *Influence* concerns the external pressure from others, most often from an older drug-abusing male. The third subtheme within this core, *the spiral of addiction*, describes the downward spiral of negative problems associated with drug use. *Rock bottom* concerns the profound negative events just prior to the participant

contemplating help. *Lifelong Recovery* represents the ongoing struggle with addiction even with treatment.

The second major theme, *The Tipping Point* describes a discrete point in time when the women decided to get help. Often this was a traumatic or significant event, a “this is it” moment in time. Seven of the thirteen women described a significant tipping point. Others described a more gradual decision to get help

In the third major theme, *Perceptions of Methadone*, the participants described what it has been like to be in methadone treatment so far. For some of the women this was a reflection of past experiences in methadone treatment. For some women it was a description of their time in treatment so far. Included in this major theme are the experiences of women who have given birth while they were on methadone in the past.

All thirteen of the women chose to sequence their story chronologically without any provocation from the researcher. In this manner, the participants were able to build their story up to where over half of them described a tipping point, a moment in time that pushed them over the edge and to seeking help with methadone. Some of the women ended their interview with their beliefs on the process of recovery as ongoing, the notion of lifelong recovery. This belief enhanced the idea that addiction is a reality, and despite methadone’s effectiveness at promoting abstinence from drugs, that history of use never goes away. It requires a great deal of effort to recover from a life consumed by drugs. For the women in this study, they are trying.

The following discussion concerns the analysis of each of the major and subthemes.

The Journey of Addiction

None of the women in this study began their story by describing that they expected to become addicted to opioids, even though their stories began with describing drugs in a positive light. Consistent with the literature, women usually began with experimentation and then turned to more regular use with illicit pain pills and then heroin, often because it was less expensive (Canfield et al., 2010).

Some of the women endorsed a history of trauma and pain that they believed made them more prone to drug use. Many of these women described drugs as providing comfort to them during traumatic times, and others described the drug's ability to mask a traumatic reality. Some of the participants remembered their parents, siblings or people in their neighborhood using drugs. Many of the women discussed the influence of a male, often an older man who was also a drug user, when they started using drugs. Others described taking prescription pain medications at first to control physical pain. Combined with a history of emotional distress or trauma, this is consistent with the literature that women who have emotional and affective distress are more likely to misuse opioids (Jamison et al., 2010).

Women described initiating their drug use because of the influence of others, many of them (46%) because of an older drug-using man whom they determined to be “stable” financially. However, despite this influence of others to start using drugs, when it came to deciding they needed treatment, the focus shifted from an extrinsic to an intrinsic motivation. This is the foundation for the second major theme, the *Tipping Point*.

The Tipping Point

The Tipping Point, describes the period in time when the women decided to get help. For all but one (92%) of the women, the choice to start drug treatment was their intrinsic and their own. For seven (54%) of the women, there was a discrete “ah ha” moment, and often a substantial event, such as Anna’s experience of violence. Each of the women remembered and described this time vividly, as a meaningful and momentous part of their drug use journey. For these women they went on to describe methadone in a largely positive light, as if they were relieved that they had reached their peak and are now on the path to recovery. In the way that the seven women describe this time it was a building of their story, of tension and of despair; and then as they began to speak of crossing over that tipping point and starting treatment, there was an air of lightness to them as they spoke. For Anna who spoke of a violent event as her tipping point, she seemed almost relieved to have told her story of that night.

Motivation to Get Help

Perhaps the most important finding of this qualitative study was the degree of extrinsic motivation to start using drugs (family problems, trauma, and male influence) and then an intrinsic motivation of the women to seek help for recovery. Consistent with the literature, women are often prone to external influence to start using drugs, especially if they have a prior history of trauma or abuse (Back et al., 2011; Botzet, Winters, & Stinchfield, 2006; Engstrom, El-Bassel, Go, & Gilbert, 2008; Greenfield et al., 2010), or if their partner is also using drugs (Hamilton & Grella, 2009), and this is demonstrated within the stories of the women in this study. But the motivation for seeking help for drug use in this study is dissimilar to the literature currently available that suggests

women enter recovery treatment to please someone other than themselves, such as their parents or a partner. Prior literature has been largely based on the premise that women often assume the role of nurturer, partner and parent and care for and place others before themselves therefore entering drug treatment to gratify other people (Engstrom et al., 2008; Greenfield et al., 2010).

Contrary to what prior researchers report in the literature that addicted women often have extrinsic motivation for seeking help, the women in this study almost entirely (92%) endorsed a self-centered reason for seeking treatment. This finding is important because it may help to add to the knowledge base of how we approach women with addiction and facilitate their decision to seek help. By considering a self-centered approach to viewing drug treatment, strategies to empower women as individuals may be beneficial to their treatment entry and success. In particular, nurses who identify that a woman needs or wants help for drug addiction can use empowerment strategies in their patient education about behavior change and treatment-seeking.

The concept of change as discussed in the Transtheoretical Model of Change by Prochaska and DiClemente help to explain why the participants in this study responded that the decision to enter treatment was largely their own. It can be concluded that all of the thirteen participants had entered at least the *action* stage because they were actively seeking help. In terms of the TTM concept of *decisional balance*, where the woman decides that the gains will outweigh losses if she enters treatment, among the participants in this study the balance has tipped in the favor of getting help. Because all of the women in this study were in methadone treatment voluntarily, each made the conscious decision that the costs of using outweighed the benefits of treatment.

Relationship to the 12-Step Program

The responses from the participants regarding their intent to get help also aligns with the typical first step of the Narcotics Anonymous 12-step program, *We admitted that we were powerless over our addiction, that our lives had become unmanageable.* This is a common way for addicts to describe their decision to change and for the women in this study the concept evolved as they told stories about the downward spiral of addiction. The women in this study also commonly related to step four of the program that asks the user to take a close inventory of the factors that led to their addiction as they recounted the events in their past that influenced to their drug use.

Perceptions of Methadone

The majority of the women described being in methadone as a *positive experience*, the foundation of another subtheme in this study. This was especially true within the group of women who had prior treatment experience with methadone. The women discussed how they were excited about their decision to get help, and many of them described how the treatment would help them to regain normalcy in a non-drug-using world. In fact, three of the women used the explicit statement “I want my life back” within their individual story (Aubrey, Diane and Faith). The women discussed methadone treatment as providing supportive structure through their recovery, stating that the counselors and providers give them the guidance and “monitoring” they need. The women who had prior treatment experience and endorsed methadone positively reflect the participants in the study by Gwin-Mitchell and her associates (2011) with regards to her discussion on lifelong recovery and the “drug treatment career” that users often experience.

When it came to discussing the positive aspects of methadone treatment, the focus shifted again to a self-centered view of treatment. The women spoke of methadone's ability to help them regain control over their own life, not to please someone else.

Four of the women, however, described methadone as a very *negative experience*. For them, they regarded methadone as simply "legal dope" but have chosen this treatment because it was less expensive and easier to obtain than street drugs. One woman even reported that she wished she would have never been accepted into treatment because she was only in it to get less expensive opioids, and is now struggling for a way out. Another participant spoke of how she decided that she wasn't going to stay in treatment even before she started. The descriptions of the women on the negative aspects of methadone seemed to free them of their thoughts as they seemed very eager to jump to their negative attitudes about methadone during their interview. In each of their four interviews, it seemed as though they were hurriedly getting to the part where we discussed methadone itself and they were less interested in discussing their history of drug use or even their future.

Seven of the women had experience with methadone treatment in the past. They were able to verbalize their perceptions of treatment and were able to tell of their positive and negative experiences with treatment previously. Even for the women who were in methadone for the first time, they were able to voice their attitudes toward treatment so far. For the women who were in treatment for the first time, their attitude was universally positive, they said that they were happy they made the decision to start treatment and were excited to start. For the women who had experience with methadone in the past there were mixed attitudes about the aims and outcomes of treatment.

According to Gwin-Mitchell and colleagues (2011), the “drug treatment career” is common among opioid users. Many women have had previous experience with drug treatment, sometimes with methadone and sometimes with other modalities and many had been in treatment multiple times. This is also consistent with the participants in this study who said that addiction recovery is a lifelong process characterized by treatment, triumphs and relapses.

Implications for Nursing Practice

It is easy to dismiss drug users, men or women, as being socially unacceptable, manipulative, poor, and uneducated. But drug addiction can affect anyone as demonstrated in this study. Many of the women who participated remarked that they never expected to become addicted to opioids, and there were no predetermined characteristics that they possessed that led them to addiction. In terms relating the findings of this study to the phenomenological perspective and the tenets of John Paul Sartre, several factors have shaped what these women have become as drug users and also what they will be during and after treatment. It is crucial for nursing to consider that addiction is not always predetermined and having open-mindedness about addiction is critical for nursing.

Nurses should be aware of the potential problem of opioid use in all of the patients they care for. By screening patients on admission, such as to the Emergency Department or hospital ward, nurses can identify patients who may have a problem with drug use early. It is also important that repeated screening be done, at every new encounter with the patient, in order to screen for drug use disorders.

Nurse Practitioners and those in clinical practice have an added responsibility to screen patients for opioid use disorder, especially as prescribers of potentially abused medications. SBIRT screening (Screening, Brief Intervention, Referral and Treatment) has been suggested as a, effective and brief measure of screening for drug use disorders (SAMHSA, 2013). In addition to private practice, healthcare providers on college campuses should be mindful of the SBIRT screening method as well as of the overall prevalence of drug use on college campus communities.

Motivation

Results of this study have identified that intrinsic motivation is important to women seeing treatment for opioid use disorders. These findings can prove particularly useful for nurses who help women to navigate and rationalize change at different times in the addiction continuum. Nurses can help women to identify intrinsic facilitators and barriers to change and are poised to help develop interventions for patients to traverse extrinsic barriers (such as transportation issues). The findings may also traverse into other addiction treatment as well, such as smoking cessation, and facilitate better interventions for other types of addiction.

A study exploring women's drug use treatment in the areas where literature has been lacking is crucial to nurses in a variety of health care settings. Emergency room nurses often treat those with complications of opioid use such as overdose. Advanced practice nurses who prescribe opioids for pain must be aware of the use and addiction liability of these drugs. Public health and community health nurses often treat those whom contract HIV or other infectious diseases as a result of intravenous opioid use. And largely, nurses and other health care professionals are in a unique position to help

identify opioid use disorders, assess a patient's ability for change, and help them navigate through available treatment options. Findings from this study can help guide practice and may suggest nursing interventions.

This study adds important depth to the phenomenon of women's opioid addiction and their treatment experience. It is vital that nursing recognize and appreciate this problem from a qualitative view in order to begin to understand what these women go through. It is only after this understanding that nurses can assist women addicts who want to seek treatment, and to identify the consequences of opioid addiction even among those who don't. Because opioid abuse among women and men is such a prevalent problem in our communities, nurses are in a unique position to support and advocate for patients who need help and to help patients make informed decisions about treatment. This study may also help nursing students and new graduates to appreciate substance use nursing as a sub-specialty.

Although we may not be able to stop or even slow down the epidemic of opioid addiction in the United States because of powerful extrinsic motivators such as availability and marketing of drugs, we can help to empower those who are using to seek effective help. The findings of this study show that intrinsic motivation is very powerful for these women; and nursing and other disciplines can use this concept to empower women to enter treatment. And for those who have already sought help, we can further empower them to succeed. With increased awareness, we can continue to support women and help them to achieve their goals.

Implications for Policy

Because of the small sample size for this study, policy implications are limited. That being said, however, results of this study can inform administrators of methadone treatment centers, women who may be contemplating entering methadone treatment, nurses and other healthcare workers in a variety of settings who may assist women in seeking treatment, and policy makers who fund and develop drug treatment programs. Well-informed policy decision-making about the special needs of women entering methadone treatment is critical to their recovery. The findings may inform changes in the community such awareness is heightened and social stigma is reduced. This study may inform the development of policy for the growth and operations of methadone treatment centers as the awareness of women's barriers and motivators for change are discovered.

In a time of increasing healthcare costs, it is important that policy makers understand the negative consequences of untreated opioid abuse. This study adds important knowledge about those consequences, and may help policy makers to understand the importance of available quality treatment centers. In addition, those policy makers who design and implement methadone treatment facilities may gain new insight from the women in this study regarding experiences they have had with treatment and their views, both positive and negative, regarding methadone.

Implications for Theory

Although an assumption of qualitative work is that there is no preconceived theoretical framework, the findings of this study were analyzed in such a way to induce salient themes among individuals and also as an aggregate. Other researchers may use

these findings to generate a theoretical explanation for the data although, again, this is not the primary aim of this work.

Implications for Research

With hope, the findings from this study will fuel greater interest in the topic of women and drug use. Results of this inquiry will add to the contemporary knowledge base of substance use disorders and nursing research by describing the experiences of women entering methadone treatment and articulating their stories about drug use and treatment. It will serve as a platform for describing women's unique experiences and will help to drive future research in this important topic. Results of this study may influence opioid-using women by informing the literature about their unique life experiences, needs and goals for treatment and increasing overall awareness of this substantial problem.

Recommendations for Further Research

The results of this study will be the start of an ambitious research agenda for me given the number of facets of the important problem of women and drug use.

In terms of this study, the primary recommendation for future research would be to make follow-up contact with the thirteen participants for a second interview during the course of their treatment, six months or more following the initial contact. This would be helpful in determining how many of the women remained in treatment, and whether or not their initial perceptions of treatment changed over time. It would also help to determine the retention rate of treatment or if any of the women relapsed during that time period.

Because of the large percentage of women in this study (46%) who had been in treatment with methadone previously, it would be important to understand what causes

women to relapse and return to drug use. Although we understand that relapse is common with respect to drug treatment, it is not quite clear why relapse occurs. This was not a questions asked in this study, although some of the women spoke of environmental factors that predisposed them to relapse. This is especially true among the women with a history of trauma and abuse, who have verbalized emotional ties to drug use. A secondary analysis involving women who have been in methadone treatment in the past is possible.

For the women who had recently given birth while on methadone, it would be interesting to know the health of the babies over time. In addition, a study aimed specifically at why women initiate and continue drug use while pregnant would add depth to what we know, especially given the history of trauma among women. A secondary analysis aimed at the unique experiences of women who have been pregnant while on methadone is conceivable.

Even though some of the women in this study experienced negative legal consequences related to their drug use, none of the women were actively on probation or parole at the time of their interview. Exploring the experience of methadone treatment for women who are court-ordered into drug treatment would add a very interesting layer to the study of women and methadone treatment.

In terms of the broader study of women's life history narratives, I plan to continue to study the construction of narratives and why we choose to tell certain details while leaving others out. I am interested in how our reality becomes our reality, why we remember certain events more than others, and how we give meaning to our experiences.

With hope, this study will fuel further interest in the topic of women's substance abuse issues and the lives these women lead. Important studies on the topic of women's substance abuse treatment can emerge and lead to positive outcomes with a deeper understanding of gender-related issues.

Limitations of the Study

This study is limited by the basis of being an exploratory study. Although there is a lack of generalizability to the general drug-using population given the small sample size and purposive sampling, it is suggestive of women entering methadone treatment for recovery.

This study is further limited by the lack of longitudinal interviews or follow-up with the participants following the initial interview. It is unclear as to how many of the thirteen women remained in treatment or how many were successful in treatment. Although the women were invited to contact the researcher with any additional questions or additional information, no follow-up contact has been made at the time of this writing.

The size of the sample is an additional limitation of this study. Although data saturation occurred and salient themes were common among the involved participants, I cannot absolutely exclude that additional participants would not have given at least some new information to the study. For example, none of the women were currently on probation or parole for drug-related issues and this subgroup would have added to the study about motivators for treatment.

Moreover, the treatment clinic chosen to draw the sample from required the patient to be able to pay for intake, treatment and counseling. This excluded any women who was uninsured, underinsured or who otherwise could not pay for treatment. Further,

according to the literature on the characteristics of women in methadone treatment, this sample may not be representative of methadone-treated women on a larger scale.

Although they were not excluded in this study, there were no participants who had not graduated high school or obtained their GED, for example. This is not typical of the usual population of methadone users where large percentages do not finish high school or their GED. Also in this study, those who did not speak English were excluded. Even though the number of Spanish-only speaking women at this particular clinic was low, Texas has a very large percentage overall of Spanish-speakers and a study inclusive of them in the future may better represent the community at large.

Final Remarks

Opioid use among women in the United States is a major public health problem with no sign of relenting. It seems as though we have a good grasp on just how many people are using drugs and what they are using. However, we have just started to understand that drug users are people with very important stories to be told. The thirteen courageous women in this study were able to share their darkest times for the sake of this study, and their voices will hopefully resonate with all those interested in substance use disorders, public health, and women's health issues. I was so touched by how welcoming the women were to me, a complete stranger, who wanted to talk with them about such a sensitive topic as drug use.

Regrettably, there is much more work to be done. This is but a small sampling of the thousands of women struggling with opioid use and treatment; however this study represents a segment of them well. It has found that the journey from use to treatment is long and complicated but some women persevere and make it into treatment.

The participants I have met and the stories they shared are unforgettable for all the findings described above and even more than I can put into words. More than anything, I hope that all those interested in women's health, women's substance use issues and in the pandemic of drug use in our country views these women with as much importance as I have.

Appendix A



Melissa Spadanuda
 IRB Manager
 Institutional Review Board
 Engelmann 270
 P. O. Box 413
 Milwaukee, WI 53201-0413
 (414) 229-3173 phone
 (414) 229-6729 fax

New Study - Notice of IRB Expedited Approval

<http://www.irb.uwm.edu>
spadamd@uwm.edu

Date: November 5, 2012

To: Kim Litwack, PhD
Dept: College of Nursing

Cc: Melissa Rubio

IRB#: 13.083

Title: The Experiences of Women Entering Methadone Treatment: A Narrative Inquiry

After review of your research protocol by the University of Wisconsin – Milwaukee Institutional Review Board, your protocol has been approved as minimal risk Expedited under **Category 6 and 7** as governed by 45 CFR 46.110.

In addition, your protocol has been granted **Level 3** confidentiality for Payments to Research Subjects per UWM Accounting Services Procedure: 2.4.6.

This protocol has been approved on **November 5, 2012** for one year. IRB approval will expire on **November 4, 2013**. If you plan to continue any research related activities (e.g., enrollment of subjects, study interventions, data analysis, etc.) past the date of IRB expiration, a continuation for IRB approval must be filed by the submission deadline. If the study is closed or completed before the IRB expiration date, please notify the IRB by completing and submitting the Continuing Review form found on the IRB website.

Unless specifically where the change is necessary to eliminate apparent immediate hazards to the subjects, any proposed changes to the protocol must be reviewed by the IRB before implementation. It is the principal investigator's responsibility to adhere to the policies and guidelines set forth by the UWM IRB and maintain proper documentation of its records and promptly report to the IRB any adverse events which require reporting.

It is the principal investigator's responsibility to adhere to UWM and UW System Policies, and any applicable state and federal laws governing activities the principal investigator may seek to employ (e.g., [FERPA](#), [Radiation Safety](#), [UWM Data Security](#), [UW System policy on Prizes, Awards and Gifts](#), state gambling laws, etc.) which are independent of IRB review/approval.

Contact the IRB office if you have any further questions. Thank you for your cooperation and best wishes for a successful project

Respectfully,

 Melissa C. Spadanuda
 IRB Manager



BRENTWOOD
CLINIC SOUTH

5201 McCart Street, Suite H
Fort Worth, TX 76115
Phone: 817.207.8700
Fax: 817.207.8778

October 25, 2012

To whom it may concern,

This letter is in support and acknowledgement of Mellissa Rubio's Doctoral study here at Brentwood Clinic South, a MedMark Inc. facility. We have made all of the arrangements to accommodate Ms. Rubio. We anticipate her visit with hopes to further our industry's understanding of the milady known as addiction. Please accept this as our letter of approval for her to conduct this study here at our clinic and with our patients under the supervision of our staff.

If, you have any further questions, Please don't hesitate to ask.

Sincerely,

Michael L. (Lenny) Welpman
Program Director
Brentwood Clinic South

Appendix B

Attention Women!
Are You Interested in a
\$30 Wal-Mart Gift
Card?

Are You Willing to Help Me to Better
Understand your Experience Here?

If you are here on your first or second day of
methadone treatment- I would like to speak with
you

Interviews will take place here at the clinic
whenever it is convenient for you

Interviews will last about 60 to 90 minutes

Please Call Me now at (817) 382-8120

Melissa Rubio, PhD student, University of Wisconsin –

Milwaukee

Appendix C: Study Information

Melissa M. Rubio, MSN, RN, FNP-BC
Ph.D. Candidate
University of Wisconsin – Milwaukee

Dear Participant,

My name is Melissa Rubio. I am a Ph.D. student in the college of nursing at the University of Wisconsin in Milwaukee. My major professor is Dr. Kim Litwack. Thank you for taking time to consider participation my research study on women entering methadone treatment. I would like to interview you on your experiences coming here. Your story will help me learn more about why you are here and what problems you may have faced in getting here. Your story will help us understand how women come into treatment. The findings of this study will inform a variety of people concerned about women's addiction.

There are many pieces of information I would like you to know about this study:

- I am not employed by the methadone clinic nor have I paid the clinic to be able to interview you.
- You will be asked to schedule an interview with me on treatment days 2 or 3. This is so you can share your story about treatment early-on in in your journey. You can either sign up for an appointment before you leave or call me directly at (817) 382-8120 to schedule an interview.
- If you agree to participate in the study, you will do the following:
 - I will ask you some brief screening questions to determine if you are eligible to participate in the study.
 - If you are eligible, we will begin the interview. The interview will be done in a closed office with only you and I. Interviews will be tape-recorded and eventually transcribed into written form. The interview will last about an hour and a half. In order for me to remember what you tell me during your interview, I will record the information which will be transcribed later. I will also take notes. I will ask you a few questions about the history of your drug use and then ask you to tell the story of your decision to come to methadone treatment at this point in time.
 - Your confidentiality is very important. At no time will your name be used to identify you. An alias name will be provided for you, or you may choose a name you would like to use.
 - Participation in this study does not affect your treatment plan in any way. I am not an employee of the methadone clinic and have no control over your treatment plan.
 - Regardless of whether or not you choose to participate, there will be no consequences with respect to your treatment here. That is to say, choosing to participate will not improve your treatment or relationships with staff here and choosing not to participate will not hurt your treatment or relationships with staff here.
 - At the end of your time with me, you will be compensated with a \$30 Wal-Mart gift card for your time
 - At the end of the study, you will be allowed access to the results of the study if you choose to view them.

Thank you, again, for your consideration of participation. Your story is very important to me, and can be very important to many others as well. It is important that we gain a better understanding of your experiences in order to make treatment better and easier for women. I look forward to meeting you soon!

Please call me now at (817) 382-8120 to schedule.

Best regards,
Melissa

Appendix D: Informed Consent

UNIVERSITY OF WISCONSIN – MILWAUKEE CONSENT TO PARTICIPATE IN RESEARCH

THIS CONSENT FORM HAS BEEN APPROVED BY THE IRB FOR A ONE YEAR PERIOD

General Information

Study title: The Experiences of Women Entering Methadone Treatment: A Narrative Inquiry

Person in Charge of Study (Principal Investigator):

My name is Melissa Rubio. I am a doctoral student in the College of Nursing at the University of Wisconsin in Milwaukee. My major professor is Dr. Kim Litwack.

Study Description

You are being asked to participate in a research study. Your participation is completely voluntary. You do not have to participate if you do not want to.

Study description:

The purpose of this study is to learn about the experiences women have as they enter methadone treatment. Because women may experience help for addiction differently than men, I am interested to know your story about your reasons to get help. By listening to women's stories about addiction and treatment, I hope to better understand what you are going through and also to inform others who are concerned with women and drug treatment.

Study Procedures

What will I be asked to do if I participate in the study?

If you agree to participate, you and women from the clinic will be asked to meet with me for a one-on-one interview. You will take part in a single interview with me. This meeting will last about one and a half hours.

With your permission, I will record your voice during the activities with a tape recorder. The recording will be done to make sure I accurately record your views. If you do not want to be audiotaped, please let me know. I will instead take notes during your interview as best I can to accurately record what you say. Please know that this may make it very difficult to accurately study and present your story.

I will begin the interview by asking you about your age, educational level and if you have children. I will also ask about your relationship status. I will ask questions about your drug-use history and the types of drugs you use. After getting to know those things about you, I will ask questions that will help you tell me your story about getting into methadone treatment.

Risks and Minimizing Risks

What risks will I face by participating in this study?

The potential risks for participating in this study are minimal – no greater than what you would experience from attending the clinic as you normally would.

1. **Psychological:** There is a small possibility that you may feel embarrassed talking about your experiences with me. However, interviews are designed so that you can freely tell your story. If you are asked a question you do not want to answer, you do not have to answer that question. You may also feel emotional feelings from being asked to re-live certain situations. If at any time you need to rest or take a break, please let me know. You may also stop the interview at any time without negative consequences.

Benefits

Will I receive any benefit from my participation in this study?

There are no direct benefits to you other than to further research.

Study Costs and Compensation

Will I be charged anything for participating in this study?

You will not be responsible for any cost of taking part in this research study.

Are subjects paid or given anything for being in the study?

As a token of my appreciation for your participation in this study, you will a \$30 Wal-Mart gift card for your time.

Confidentiality

What happens to the information collected?

All information collected about you during the course of this study will be kept confidential to the extent permitted by law. We may decide to present what we find to others, or publish our results in scientific journals or at scientific conferences. Only the PI and her faculty advisor will have access to the information. However, the Institutional Review Board at UW-Milwaukee, or appropriate federal agencies like the Office for Human Research Protections may review your records.

You will be identified on tape or on paper with a made-up name. Your name will not appear anywhere and no one will know about your answers except me.

After I meet with you, the voice recordings of the activities will be typed word for word by a transcription company. The recordings will be erased immediately after this is complete. The transcripts of the recordings will be stored in a locked file cabinet while they are being studied.

All of the information collected for this study will be destroyed when the study is complete.

No one will be able to link the information you give me back to you, and at no time during the study will the clinic staff see the information you give me.

Alternatives

Are there alternatives to participating in the study?

There are no known alternatives available to you other than not taking part in this study.

Voluntary Participation and Withdrawal

What happens if I decide not to be in this study?

Your participation in this study is entirely voluntary. You may choose not to take part in this study, or if you decide to take part, you can change your mind later and withdraw from the study. If you decide not to participate in the study, it will not affect the resources available to you, your care received at the clinic nor your relationship with the clinic. You are free to not answer any questions or withdraw at any time. Your decision will not change any present or future relationships with the University of Wisconsin Milwaukee. The investigator may stop your participation in this study if I feel it is necessary to do so.

If you decide to withdraw or if you are withdrawn from the study before it ends, I will use the information we collected up to that point.

Questions

Who do I contact for questions about this study?

For more information about the study or the study procedures or treatments, or to withdraw from the study, contact:

Melissa Rubio
Nursing PhD Student
University of Wisconsin – Milwaukee
(817) 382-8120

Who do I contact for questions about my rights or complaints towards my treatment as a research subject?

The Institutional Review Board may ask your name, but all complaints are kept in confidence.

Institutional Review Board
Human Research Protection Program
Department of University Safety and Assurances
University of Wisconsin – Milwaukee
P.O. Box 413
Milwaukee, WI 53201
(414) 229-3173

Signatures

Research Subject's Consent to Participate in Research:

To voluntarily agree to take part in this study, you must sign on the line below. If you choose to take part in this study, you may withdraw at any time. You are not giving up any of your legal rights by signing this form. Your signature below indicates that you have read or had read to you this entire consent form, including the risks and benefits, and have had all of your questions answered, and that you are 18 years of age or older.

Printed Name of Subject/ Legally Authorized Representative

Signature of Subject/Legally Authorized Representative

Date

Research Subject's Consent to Audio/Video/Photo Recording:

It is okay to audiotape me and use my audiotaped data in the research.

Please initial: ___Yes ___No

Principal Investigator (or Designee)

I have given this research subject information on the study that is accurate and sufficient for the subject to fully understand the nature, risks and benefits of the study.

Printed Name of Person Obtaining Consent

Study Role

Signature of Person Obtaining Consent

Date

Appendix E: Example Probing Questions

Category	Subcategory	Probe
Content Mapping	Ground Mapping	<ul style="list-style-type: none"> •Why is that? •What makes you say that? •What changed? •Why now?
	Perspective-Widening	<ul style="list-style-type: none"> •Are there any other factors that influenced your decision? •What might have made your decision different? •People talk about other people motivating them into treatment. Do you see that as a factor here?
	Aplificatory Probes	<ul style="list-style-type: none"> •Can you tell me a little more about that? •Can you give me an example of that? •When you say that ..., what gave you that impression? •What was it exactly that you liked/didn't like about ...? •How did that make you feel?
Content Mining	Exploratory Probes	<ul style="list-style-type: none"> •How did you respond when...? •What did you feel when? •Why did you think it was important to...?
	Explanatory Probes	<ul style="list-style-type: none"> •What makes you say that? •What was it about... that made you decide to...?
	Clarificatory Probes	<ul style="list-style-type: none"> •How was it... (scary/hard/easy)? •Could you explain what you mean by...? •You said it was In what way was it...? •Some people have thought about... Did those feelings ever happen to you?

References

- American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders* (2000). (4th ed.). Washington, DC.
- Andrews, C. M., Cao, D., Marsh, J. C., & Shin, H. (2011). The Impact of Comprehensive Services in Substance Abuse Treatment for Women With a History of Intimate Partner Violence. *Violence Against Women, 17*(5), 550-567.
- Apa-Hall, P., Schwartz-Bloom, R. D., & McConnell, E. S. (2008). The current state of teenage drug abuse: trend toward prescription drugs. *Journal of School Nursing (Allen Press Publishing Services Inc.)*, S1-14.
- Back, S. E., Payne, R. L., Wahlquist, A. H., Carter, R. E., Stroud, Z., Haynes, L., . . . Ling, W. (2011). Comparative profiles of men and women with opioid dependence: results from a national multisite effectiveness trial. *Am J Drug Alcohol Abuse, 37*(5), 313-323. doi: 10.3109/00952990.2011.596982
- Bloom, B., & Covington, S. (1998). *Gender-specific programming for female offenders: What is it and why is it important?* Paper presented at the American Society of Criminology Annual Meeting Washington, DC.
- Botzet, A. M., Winters, K. C., & Stinchfield, R. (2006). Gender differences in measuring adolescent drug abuse and related psychosocial factors. *Journal of Child & Adolescent Substance Abuse, 16*(1), 91-108.
- Byrne, M. H., Lander, L., & Ferris, M. (2009). The changing face of opioid addiction: Prescription pain pill dependence and treatment. *Health & Social Work, 34*(1), 53-56.

- Calsyn, D., Crits-Christoph, P., Hatch-Maillette, M. A., Doyle, S. R., Song, Y., & Pelta, S. (2010). Reducing sex under the influence of drugs or alcohol for patients in substance abuse treatment. *Addiction*, *105*(1), 100-108.
- Calsyn, D. A., Campbell, A. N., Crits-Christoph, P., Doyle, S. R., Tross, S., Hatch-Maillette, M. A., & Mandler, R. (2010). Men in methadone maintenance versus psychosocial outpatient treatment: differences in sexual risk behaviors and intervention effectiveness from a multisite HIV prevention intervention trial *J Addict Dis* (Vol. 29, pp. 370-382). England.
- Canfield, M. C., Keller, C. E., Frydrych, L. M., Ashrafioun, L., Purdy, C. H., & Blondell, R. D. (2010). Prescription Opioid Use among Patients Seeking Treatment for Opioid Dependence. *J Addict Med*, *4*(2), 108-113. doi: 10.1097/ADM.0b013e3181b5a713
- Cavacuiti, C. A. (2011). *Principles of Addiction Medicine: The Essentials*. Philadelphia, PA: Lippincott, Williams & Wilkins.
- Colling, J. (2003). Designing Clinical Research Studies: Part 1. *Urologic Nursing*, *23*(5), 357-360.
- Corsi, K. F., Lehman, W. K., & Booth, R. E. (2009). The effect of methadone maintenance on positive outcomes for opiate injection drug users *J Subst Abuse Treat* (Vol. 37, pp. 120-126). United States.
- De Maeyer, J., Vanderplasschen, W., Lammertyn, J., van Nieuwenhuizen, C., & Broekaert, E. (2011). Exploratory study on domain-specific determinants of opiate-dependent individuals' quality of life *Eur Addict Res* (Vol. 17, pp. 198-210). Switzerland: Basel.

- De Maeyer, J., Vanderplasschen, W., Lammertyn, J., van Nieuwenhuizen, C., Sabbe, B., & Broekaert, E. (2011). Current quality of life and its determinants among opiate-dependent individuals five years after starting methadone treatment. *Qual Life Res*, 20(1), 139-150. doi: 10.1007/s11136-010-9732-3
- DiClemente, C. C. (2003). *Addiction and Change: How Addictions Develop and Addicted People Recover* New York NY: The Guilford Press.
- DiClemente, C. C., Schlundt, D., & Gemmell, L. (2004). Readiness and Stages of Change in Addiction Treatment. *The American Journal on Addictions*, 13, 103-119.
- Doweiko, H. E. (2009). *Concepts of Chemical Dependency* (7th ed.). Belmont, CA: Brooks/Cole CENGAGE Learning.
- Dunn, K. E., Sigmon, S. C., Thomas, C. S., Heil, S. H., & Higgins, S. T. (2008). Voucher-based contingent reinforcement of smoking abstinence among methadone-maintained patients: A pilot study. *Journal of Applied Behavior Analysis*, 41, 527-538.
- Engstrom, M., El-Bassel, N., Go, H., & Gilbert, L. (2008). Childhood sexual abuse and intimate partner violence among women in methadone treatment: A direct or mediated relationship? *Journal of Family Violence*, 23, 605-617.
- Erickson, C. A. (2007). *The Science Of Addiction: From Neurobiology to Treatment*. New York, NY: W.W Norton & Company, Ltd. .
- Field, C. A., Adinoff, B., Harris, T. R., Ball, S. A., & Carroll, K. M. (2009). Construct, concurrent and predictive validity of the URICA: data from two multi-site clinical trials *Drug Alcohol Depend* (Vol. 101, pp. 115-123). Ireland.

- Frances, R. J., Miller, S. I., & Mack, A. H. (2011). *Clinical Textbook of Addictive Disorders*. New York, NY: The Guilford Press.
- Garnier, L. M., Arria, A. M., Caldeira, K. M., Vincent, K. B., O'Grady, K. E., & Wish, E. D. (2009). Nonmedical Prescription Analgesic Use and Concurrent Alcohol Consumption among College Students. *American Journal of Drug & Alcohol Abuse*, 35(5), 334-338.
- Ghitza, U. E., Epstein, D. H., Schmittner, J. P., Vahabzadeh, M., Lin, J. L., & Preston, K. L. (2008). Effect of reinforcement probability and prize size on cocaine and heroin abstinence in prize-based contingency management. *Journal of Applied Behavior Analysis*, 41, 539-549.
- Golinelli, D., Longshore, D., & Wenzel, S. (2008). Substance use and intimate partner violence: Clarifying the relevance of women's use and partner's use. *Journal of Behavioral Health Services & Research*(Substance Use and Intimate Partner Violence), 199-211.
- Greenfield, S. F., Back, S. E., Lawson, K., & Brady, K. T. (2010). Substance Abuse in Women. *Psychiatry Clinics of North America*, 33(2), 339-355.
- Gryczynski, J., Schwartz, R., O'Grady, K., & Jaffe, J. (2009). Treatment entry among individuals on a waiting list for methadone maintenance *Am J Drug Alcohol Abuse* (Vol. 35, pp. 290-294). England.
- Gwin Mitchell, S., Morioka, R., Schacht Reisinger, H., Peterson, J. A., Kelly, S. M., Agar, M. H., . . . Schwartz, R. P. (2011). Redefining retention: Recovery from a patient's perspective *Journal of Psychoactive Drugs*, 43(2), 99-107.

- Hamilton, A. B., & Grella, C. E. (2009). Gender differences among older adult heroin users. *Journal of Women Aging, 21*(2), 111-124.
- Hanke, P. J., & Faupel, C. E. (1993). Women opiate users' perceptions of treatment services in New York City. *Journal of Substance Abuse Treatment, 10*(6), 513-522.
- Holt, J. (2009). Quantitative research: An overview. *British Journal of Cardiac Nursing, 4*(5), 234-236.
- Ibanez, G. E. (2010). Motivations for non-medical prescription drug use: A mixed methods analysis. *Journal of Substance Abuse Treatment, 39*(3), 236-247.
- Jamison, R. N., Butler, S. F., Budman, S. H., Edwards, R. R., & Wasan, A. D. (2010). Gender differences in risk factors for aberrant prescription opioid use. *Journal of Pain, 11*(4), 312-320.
- Jones, H. E., Kaltenbach, K., Heil, S. H., Stine, S. M., Coyle, M. G., Arria, A. M., . . . Fischer, G. (2010). Neonatal abstinence syndrome after methadone or buprenorphine exposure. *N Engl J Med, 363*(24), 2320-2331. doi: 10.1056/NEJMoa1005359
- Kimber, J., Copeland, L., Hickman, M., Macleod, J., McKenzie, J., De Angelis, D., & Robertson, J. R. (2010). Survival and cessation in injecting drug users: prospective observational study of outcomes and effect of opiate substitution treatment. *BMJ, 341*, c3172. doi: 10.1136/bmj.c3172
- Kreek, M. J., Borg, L., Ducat, E., & Ray, B. (2010). Pharmacotherapy in the treatment of addiction: Methadone. *Journal of Addictive Disorders, 29*(2), 200-216.

- Lobmaier, P., Gossop, M., Waal, H., & Bramness, J. (2010). The pharmacological treatment of opioid addiction-a clinical perspective. *European Journal of Clinical Pharmacology*, 66(6), 537-545. doi: 10.1007/s00228-010-0793-6
- Manchikanti, L., Fellows, B., Ailinani, N., & Pampati, H. (2010). Therapeutic use, abuse and nonmedical use of opioids: a ten-year perspective. *Pain Physician*, 13(5), 401-435.
- Manhal-Baugus, M. (1998). The self-in-relation theory and women for sobriety: Female-specific theory and mutual help group for chemically dependent women. *Journal of Addictions and Offender Counseling*, 18(2), 78-85.
- Martin, F. S. (2011). Deep entanglements: The complexities of disengaging from injecting drug use for young mothers. *Contemporary Drug Problems*, 38, 335-366.
- McCabe, S. E., Cranford, J. A., Boyd, C. J., & Teter, C. J. (2007). Motives, diversion and routes of administration associated with nonmedical use of prescription opioids. *Addictive Behaviors*, 32(3), 562-575.
- McMurphy, A., Shea, J., Switzer, J., & Turner, B. J. (2006). Clinic-based treatment for opioid dependence: A qualitative inquiry. *American Journal of Behavior*, 30(5), 544-554.
- Miller, W. R. (2006). *Rethinking Substance Abuse*. New York, NY: The Guilford Press.
- Miller, W. R., & Carroll, K. M. (2006). *Rethinking Substance Abuse*. New York NY: The Guilford Press.

- Modesto-Lowe, V., Brooks, D., & Petry, N. (2010). Methadone deaths: risk factors in pain and addicted populations. *J Gen Intern Med*, 25(4), 305-309. doi: 10.1007/s11606-009-1225-0
- NAMI. (2013). The Numbers Count: Mental Disorders in America. 2013(November 5). Retrieved from <http://www.nimh.nih.gov/health/publications/the-numbers-count-mental-disorders-in-america/index.shtml#Refs>
- Nelson-Zlupko, L., Kauffman, E., & Dore, M. M. (1995). Gender differences in drug addiction and treatment: Implications for social work intervention with substance-abusing women. *Social Work* 40(1), 45-54.
- Nicholls, D. (2009). Qualitative research: Part one- Philosophies. *International Journal of Therapy and Rehabilitation*, 16(10), 526-533.
- Nicholls, L., Bragaw, L., & Ruetsch, C. (2010). Opioid dependence treatment and guidelines *J Manag Care Pharm* (Vol. 16, pp. S14-21). United States: Academy of Managed Care Pharmacy.
- Nidecker, M., DiClemente, C. C., Bennett, M. E., & Bellack, A. S. (2008). Application of the Transtheoretical Model of change: psychometric properties of leading measures in patients with co-occurring drug abuse and severe mental illness *Addict Behav* (Vol. 33, pp. 1021-1030). England.
- Nyamathi, A., Tyler, D., Sinha, K., Marfisee, M., Cohen, A., & Greengold, B. (2010). Predictors of hepatitis knowledge improvement among methadone maintained clients enrolled in a hepatitis intervention program. *Journal of Community Health*, 35(423-432).

- Padaiga, Z., Subata, E., & Vanagas, G. (2007). Outpatient methadone maintenance treatment program. Quality of life and health of opioid-dependent persons in Lithuania *Medicina (Kaunas)* (Vol. 43, pp. 235-241). Lithuania.
- Perlis, T. E. J., D C, Friedman, S. R., Arasteh, K., & Turner, C. F. (2004). Audio-computerized self-interviewing versus face-to-face interviewing for research data collection at drug abuse treatment programs. *Addiction*, 99, 885-896.
- Peterson, J. A., Schwartz, R. P., Mitchell, S. G., Reisinger, H. S., Kelly, S. M., O'Grady, K. E., . . . Agar, M. H. (2010). Why don't out-of-treatment individuals enter methadone treatment programmes? *Int J Drug Policy* (Vol. 21, pp. 36-42). Netherlands.
- Polit, D. F., & Beck, C. T. (2008). *Nursing Research: Generating and Assessing Evidence for Nursing Practice* (8th ed.). Philadelphia, PA: Lippincott, Williams & Wilkins.
- Preston, K. L., Ghitza, U. E., Schmittner, J. P., Schroeder, J. R., & Epstein, D. H. (2008). Randomized trial comparing two treatment strategies using prize-based reinforcement of abstinence in cocaine and opiate users. *Journal of Applied Behavior Analysis*, 41, 551-563.
- Reisinger, H. S., Schwartz, R. P., Mitchell, S. G., Peterson, J. A., Kelly, S. M., O'Grady, K. E., . . . Agar, M. H. (2009). Premature discharge from methadone treatment: patient perspectives. *J Psychoactive Drugs*, 41(3), 285-296.
- Reissman, C. (2008). *Narrative Methods for the Human Sciences*. Thousand Oaks, CA: Sage Publications.

- Results from the 2012 National Survey of Drug Use and Health: Summary of National Findings.* (2013). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Rhee, S. H., Hewitt, J. K., Young, S. E., Corley, R. P., Crowley, T. J., & Stallings, M. C. (2003). Genetic and environmental influences on substance initiation, use, and problem use in adolescents. *Archives of General Psychiatry*, 60, 1256-1264.
- Ritchie, J., & Lewis, J. (2003). *Qualitative Research Practice: A Guide for Social Science Students and Researchers*. Thousand Oaks, CA: Sage Publishing.
- Rivauz, S. L., Sohn, S., Armour-Peterson, M., & Bell, H. (2008). Women's early recovery: Managing the dilemma of substance abuse and intimate partner relationships. *Journal of Drug Issues*, 38(4), 957-979.
- Ruetsch, C. (2010). Empirical view of opioid dependence. *Journal of Managed Care Pharmacy*, 16(1 Suppl B), S9-13.
- SAMHSA. (2011). *Results from the 2010 National Survey of Drug Use and Health: Summary of National Findings*. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Schacht Reisinger, H., Schwartz, R. P., Gwin Mitchell, S., Peterson, J. A., Kelly, S. M., O'Grady, K. E., . . . Agar, M. H. (2009). Premature discharge from methadone treatment. *Journal of Psychoactive Drugs*, 41(3), 285-296.
- Schwartz, R. P., Kelly, S. M., O'Grady, K. E., Mitchell, S. G., Peterson, J. A., Reisinger, H. S., . . . Brown, B. S. (2008). Attitudes toward buprenorphine and methadone among opioid-dependent individuals *Am J Addict* (Vol. 17, pp. 396-401). United States.

- Sindlear, J. L., Olmstead, T. A., & Peirce, J. M. (2007). Cost-effectiveness of prize-based contingency management in methadone maintenance treatment programs. *Addiction, 102*(9), 1463-1471.
- Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretive Phenomenological Analysis*. Los Angeles, CA: Sage Publications.
- Stotts, A. L., Dodrill, C. L., & Kosten, T. R. (2009). Opioid dependence treatment: options in pharmacotherapy. *Expert Opin Pharmacother, 10*(11), 1727-1740.
- Strain, E. C., & Stitzer, M. L. (2006). *The Treatment of Opioid Dependence*. Baltimore, MD: Johns Hopkins University Press
- Strang, J. (2002). Looking beyond death: paying attention to other important consequences of heroin overdose. *Addiction, 97*(8), 927-928.
- Tourangeau, R., & Yan, T. (2007). Sensitive questions in surveys. *Psychological Bulletin, 133*(5), 859-883.
- Tross, S., Hanner, J., Hu, M. C., Pavlicova, M., Campbell, A., & Nunes, E. V. (2009). Substance use and high risk sexual behaviors among women in psychosocial outpatient and methadone maintenance treatment programs. *American Journal of Drug & Alcohol Abuse, 35*(5), 368-374.
- Trujols, J., Sinol, N., Iraurgi, I., Battle, F., Guardiola, J., & Perez de los Cobos, J. (2011). Patient and clinician's ratings of improvement in methadone-maintained patients: Differing perspectives? *Harm Reduction Journal, 8*(1), 23-28.
- Unger, A., Jung, E., Winklbauer, B., & Fischer, G. (2010). Gender issues in the pharmacology of opioid-addicted women: Buprenorphine. *Journal of Addictive Disorders, 29*(2), 217-230.

- United Nations. (2012). World drug report. Volume 1: Analysis Retrieved November 5, 2013, from [http://www.undoc.org/pdf.WDR.2006/wdrwoo6_volumn1.pdf](http://www.undoc.org/pdf/WDR.2006/wdrwoo6_volumn1.pdf)
- Weinstock, J., Rash, C., & Petry, N. (2010). Contingency management for cocaine use in methadone maintenance patients: When does abstinence happen? *Psychology of Addictive Behaviors*, 24(2), 282-291.
- Williamson, A., Darke, S., Ross, J., & Teesson, M. (2009). Changes and predictors of change in the physical health status of heroin users over 24 months. *Addiction*, 104(3), 465-470.
- Wilson, J. F. (2007). Current clinical issues. Strategies to stop abuse of prescribed opioid drugs. *Annals of Internal Medicine*, 146(12), 897-900.
- Woods, T. M., & Hilaire, M. L. (2010). Opioid abuse and dependence: treatment review and future options. *Formulary*, 45(9), 284-291.
- Wu, L. T., Ling, W., Burchett, B., Blazer, D. G., Shostak, J., & Woody, G. E. (2010). Gender and racial/ethnic differences in addiction severity, HIV risk, and quality of life among adults in opioid detoxification: results from the National Drug Abuse Treatment Clinical Trials Network. *Subst Abuse Rehabil*, 2010(1), 13-22.
doi: 10.2147/sar.s15151
- Zaller, N. D., Fu, J. J., Bazazi, A. R., & Rich, J. D. (2010). The impact of financial discharge from methadone maintenance therapy on incarceration. *J Opioid Manag*, 6(5), 365-370.

Melissa M. Rubio, MSN, RN, FNP-BC, APNP

PROFESSIONAL SUMMARY

Family Nurse Practitioner

Highly skilled career professional with advanced practice nursing experience in adult internal medicine, correctional healthcare and caring for the physical health needs of psychiatric inpatients. Current ANCC Certification, APNP licensure, Texas licensure, Texas DPS and DEA registration.

Part-time, adjunct nursing faculty for Alverno College. Clinical instructor for juniors and seniors.

1 year of experience with treating methadone patients in an outpatient treatment program.

Experienced critical care registered nurse prior to completing nurse practitioner program, skilled in the management of acute cardiac medical patients in a large, urban ICU. Prior to RN was a skilled and certified nursing assistant on a medical/surgical floor, cardiac telemetry floor, and ICU.

CREDENTIALS

Registered Nurse, State of Wisconsin, State of Texas	2002,2012
Advanced Practice Nurse Prescriber, State of Wisconsin, Texas	2005,2012
Board Certified Family Nurse Practitioner, ANCC	2005
Certified Correctional Health Professional, NCHC	2008

EXPERIENCE

Family Nurse Practitioner <i>Office of Dr. Salma Mazhar; Mesquite, TX</i>	May 2013- Present
Family Nurse Practitioner <i>McCart Medical Associates; Fort Worth, TX</i>	September 2012-May 2013
Family Nurse Practitioner <i>Milwaukee County Mental Health, Milwaukee WI</i>	March 2012- August 2012
Nurse Practitioner, Outpatient Treatment Program <i>10th Street Clinic, Rivers Shore Clinic, Divisions of CRC Healthgroup</i>	August 2011- March 2012
Nursing Faculty, Clinical Instructor N375, N455 <i>Alverno College, Milwaukee, Wisconsin</i>	2011- June 2012
Family Nurse Practitioner <i>Milwaukee County Office of the Sheriff</i>	May 2005- July 2011
Registered Nurse <i>St. Lukes Medical Center, Milwaukee, Wisconsin</i>	1998-2005

EDUCATION

University of Wisconsin – Milwaukee, PhD Doctoral Candidate	2008-Present
University of Wisconsin – Milwaukee, MSN	2005
University of Wisconsin – Milwaukee, BSN	2001

AFFILIATIONS

National Alliance on Mental Illness, Member
Sigma Theta Tau Eta Nu Chapter Member
North Texas Nurse Practitioners, Member
Southern Nursing Research Society, Member