2018

The feasibility and acceptability of using a Medication Assisted Treatment (MAT) program with suboxone for patients in a community behavioral clinic

Marina Nedospasova

THE FEASIBILITY AND ACCEPTABILITY OF USING A MEDICATION ASSISTED TREATMENT (MAT) PROGRAM WITH SUBOXONE FOR PATIENTS IN A COMMUNITY BEHAVIORAL CLINIC

by

MARINA NEDOSPASOVA, MSN, MA, FNP-BC, FNP-C, PMHNP-BC

A DNP PROJECT

Submitted in partial fulfillment of the requirements for the
Degree of Doctor of Nursing Practice

to

The School of Graduate Studies

of

The University of Alabama in Huntsville

HUNTSVILLE, ALABAMA
2018

In presenting this DNP project in partial fulfillment of the requirements for a doctoral degree from The University of Alabama in Huntsville, I agree that the Library of this University shall make it freely available for inspection. I further agree that permission for extensive copying for scholarly purposes may be granted by my advisor or, in his/her absence, by the Director of the Program or the Dean of the School of Graduate Studies. It is also understood that due recognition shall be given to me and to The University of Alabama in Huntsville in any scholarly use which may be made of any material in this DNP project.

10/30/2018

Student Signature Date

DNP PROJECT APPROVAL FORM

Submitted by Marina Nedospasova in partial fulfillment of the requirements for the degree of Doctor of Nursing Practice and accepted on behalf of the Faculty of the School of Graduate Studies by the DNP project committee.

We, the undersigned members of the Graduate Faculty of The University of Alabama in Huntsville, certify that we have advised and/or supervised the candidate on the work described in this DNP project. We further certify that we have reviewed the DNP project manuscript and approve it in partial fulfillment of the requirements for the degree of Doctor of Nursing Practice.

Azita Amiri _____ Committee Chair
(Date) 10/24/18

Azar Sheikholeslami _____

_____

_____ DNP Program Coordinator

_____ College of Nursing, Associate Dean

_____ College of Nursing, Dean

_____ 11/8/18 Graduate Dean

ABSTRACT
The School of Graduate Studies
The University of Alabama in Huntsville

Degree: Doctor of Nursing Practice College: Nursing

Name of Candidate: Marina Nedospasova

Title: The Feasibility and Acceptability of Using a Medication Assisted Treatment (MAT) Program with Suboxone for Patients in a community behavioral clinic

Objectives: To determine the effectiveness, adherence, and acceptability/feasibility of a MAT program with Suboxone for three months. **Design:** A mixed method study was conducted. **Settings:** Data was collected from a community behavioral clinic, in Huntsville, Alabama. **Participants:** Clients with Opioid Use Disorder, 18 years and older participated in this study. **Methods:** Clients were selected upon meeting the Opioid Use Disorder criteria as determined by DSM-5. The participants completed the Circumstances, Motivation, Readiness questionnaire (CMR) and the National Institute on Drug Abuse (NIDA) quick screen upon client induction into the treatment program. The NIDA quick screen was re-administered in 1-, 2- and 3-month increments after starting the treatment with Suboxone. The CMR scale assessed the acceptability of the MAT program by the patients. The NIDA quick screen was used to determine the adherence, effectiveness, and feasibility of the MAT program.

Results: Five individuals, four men and one woman were recruited. All reported opioids as their drug of choice, had a long history of substance abuse, and were buying prescription opioids off the street. All clients found that the use of Suboxone in this MAT program was effective in keeping their opioid addiction under control. Wilcoxon signed-rank test showed the same significant results ($p=0.046$) for all three evaluation periods

after initiation of the MAT program. The NIDA quick screen results showed that all participants adhered to the MAT program.

The feasibility of the MAT program was assessed via the client's responses related to the use, access, helpfulness, and future use of Suboxone. All participants reported that they will continue the use of Suboxone because it is helpful to control their cravings to opioids and other substances, easy to use (oral intake), and easy to access through the pharmacy.

Conclusion: Although our study showed that the treatment with Suboxone is an effective method of opioid treatment, more studies with a larger sample size and long-term follow-up evaluations are recommended.

Abstract Approval: Committee Chair Azila Amiri

Program Director_____

Graduate Dean_____

ACKNOWLEDGMENTS

I would like to acknowledge Peter Mazurkivich for the continuous support of my DNP project and related research; for his patience, motivation, immense knowledge and proof-reading skills. His guidance helped me in the research and writing of this project.

I would also like to acknowledge Dr. Azar Sheikholeslami, MD for mentoring me during the course of this project. Lastly, I would like to thank all of my clients for their willingness to participate in my study and Dr. Azita Amiri for her guidance.

Marina Nedospasova

TABLE OF CONTENTS

The Feasibility and Acceptability of Using a Medication Assisted Treatment (MAT) Program with Suboxone for Patients in a Community Behavioral Clinic

Identification of Problem

Abuse of prescription opioids has become a significant public health problem in the United States (Steele & Cunningham, 2012). The misuse of prescription drugs is the leading cause of opioid overdoses in the past decade. The rate of opioid-overdose related deaths has quadrupled over the past 17 years, fueled by the over prescription of painkillers and the proliferation of heroin and synthetic opioids (The Centers for Disease Control and Prevention, 2017).

Approximately 7.1 million people met the criteria for an illicit drug use disorder in the past year. Consequently, substance misuse is the most prevalent cause of adolescent morbidity and mortality in the United States. In 2015, there were 33,091 overdose deaths involving prescription opioid medications (the Center for Disease Control and Prevention, 2018). This is equivalent to one death every 16 minutes (Substance Abuse and Mental Health Services Administration, 2017).

The addiction to prescribed opioids is associated with poor academic performance, school truancy, unemployment, teen pregnancy, spread of sexually transmitted diseases, HIV, hepatitis, crime, driving under the influence, and related motor vehicle accidents (Sussman & Ames, 2008). In 2009, it was estimated that the total overall cost of substance abuse in the United States, including lost productivity and health and crime-related costs, exceeded $600 billion (The Institute of Drug Abuse, 2012). The estimated annual cost for substance abuse treatment in the United State ranges from $16 to 18 billion. Without treatment, addicts in search of their next hit, turn instead to the black market, which responds to the surging demand with dangerous counterfeit opioids

that contribute to even more deaths. Study after study supports the effectiveness of drug-based therapies for opiate addiction (Stotts, Dodrill, & Kosten, 2009) & (Bart, 2012).

Only a small percentage of the 2 million people in America with opioid-use disorders get Medication Assisted Treatment (MAT), which is a public health priority in the reduction of opioid use (Murthy, 2016). There are two types of commonly prescribed opiate substitute medications in the USA: methadone and buprenorphine-naloxone (Suboxone). Originally, methadone and buprenorphine were used as analgesic agents. Methadone has been used for treating opioid dependence since 1960, and buprenorphine (Subutex) was approved in Sweden for treating opioid dependence in 1999. The combination of buprenorphine and naloxone was developed and introduced in 2006 under the name Suboxone. Methadone is a full opioid antagonist; buprenorphine is a partial mu-opioid receptor agonist (Wikner et al., 2014).

Buprenorphine-naloxone (Suboxone) is a valuable, alternative option to methadone in treatment of opiate dependence, because buprenorphine as a synthetic opiate enables the consumer to avoid the unpleasant feelings of drug withdrawal, and naloxone effectively counteracts the effects of opioids. Suboxone contains opioid antagonist naloxone and buprenorphine in a ratio of 1-part naloxone to 4-parts buprenorphine and is designed to limit the potential for misuse and diversion (Magura, 2009). For instance, naloxone as a part of Suboxone has a low bioavailability when taken sub-lingually and therefore has no effect on the potential for mis-use. If Suboxone is injected, naloxone enters the systemic blood circulation, which allows it to reach the opioid receptors to block them and negate the effects of any agonist, including buprenorphine. This can cause acute opioid withdrawal symptoms, which makes the misuse of buprenorphine- naloxone (Suboxone) very unattractive (Tanner, Bordon,

Conroy, & Best, 2011). In relation to dosing, buprenorphine in combination with naloxone has a longer duration of effect. According to Correia, Walsh, Bigelow, & Strain (2006), the effects of buprenorphine in the buprenorphine/naloxone combination are long-acting, with effects lasting for up to 98 hours.

Purpose

The establishment of MAT programs is a critical step in treating opioid addiction and reducing these opioid overdose related deaths. The purpose of this study is to determine whether a Medication Assisted Treatment (MAT) program with Suboxone can be implemented in a community mental health clinic. The objectives are:

1- To determine the effectiveness of a MAT program with Suboxone for three months.

2- To determine patient's adherence to a MAT program.

3- To determine the acceptability/feasibility of the MAT program.

Research Questions

1- Can the implementation of a Medication Assisted Treatment (MAT) program with Suboxone for three months, help adult substance abusers decrease the use of illegal/illicit substances?

2- Do the patients adhere to the MAT program?

3- Is the use of the MAT program acceptable/feasible for patients?

Literature Review

Medical guidance suggests that the decision about which opiate substitute to use should be based on individual case factors, client's preferences and choices, and also the clinician's estimated relative risk of each factor (Tanner et al, 2011). It was thought that methadone and buprenorphine-naloxone were highly and equally effective for preventing relapse to regular opioid users. McKeganey, Russell, & Cockayne (2013) investigated the

efficacy of methadone and buprenorphine-naloxone treatment. This study showed that both medications are equally effective for preventing relapses to regular heroin use. The researchers concluded that prescribing methadone and buprenorphine-naloxone for eight continuous months was highly effective for initiating abstinence from heroin use and for converting short-term abstinence to long-term abstinence.

Magura, et al. (2009) conducted a randomized clinical trial comparing buprenorphine with methadone treatment of opiate-dependent individuals in correctional settings by initiating treatment prior to prison release. The authors found that there were no post-release differences between the buprenorphine and methadone groups in self-reported relapse to illicit opioid use, self-reported re-arrests, self-reported severity of crime or re-incarceration in jail.

Some researchers had some concerns about economic considerations in regards to the use of Buprenorphine. Barnett (2009) compared the cost and utilization among buprenorphine and methadone patients by examining economic impact of buprenorphine adoption by the US Veterans Health Administration (VHA). The author concluded that despite the high cost of buprenorphine above traditional medication, it was no more expensive than methadone treatments. VHA methadone treatment costs were higher than reported by other providers.

Otiashvili, et al. (2013) conducted a randomized controlled 12-week trial to determine the effectiveness of buprenorphine and methadone in the reduction of use of unprescribed opioids and HIV risk behavior. The researchers compared buprenorphine-naloxone (Suboxone) and methadone groups and found out that there were no clinically significant differences between the two groups. They concluded that the use of methadone and buprenorphine-naloxone (Suboxone) are both effective treatments for

non-medically obtained buprenorphine and other opioids as well as risk for HIV behavior.

Lee, Klein-Schwartz, Welsh, & Doyon (2013) conducted a retrospective review of poison control center data to determine the medical outcomes associated with the nonmedical use of methadone and buprenorphine. After reviewing 1,990 cases (1,594 methadone cases and 326 buprenorphine cases), the authors concluded that clinical effects after nonmedical use of methadone was much worse (central nervous system and respiratory depression) then buprenorphine (gastrointestinal symptoms). Patients who used methadone nonmedically were more likely to fare worse on all measures of health outcomes and more likely to have received naloxone, endotracheal intubation, to be admitted to the ICU, and more likely to die. There were 26 deaths in the methadone group. The risks associated with the nonmedical use of buprenorphine were much less severe because the patients in the buprenorphine group were likely to be treated with antiemetics and benzodiazepines. In addition, there were no deaths in the buprenorphine group.

Hill, et al. (2015), compared methadone and buprenorphine-naloxone (Suboxone) as opioid substitutional therapy by questioning ninety patients from North Lanarkshire. Researches explored patient's comments on buprenorphine-naloxone (Suboxone) use, the reasons why patients prefer methadone to buprenorphine-naloxone (Suboxone), and the reasons patients would/would not consider transferring to buprenorphine-naloxone (Suboxone). The study concluded that patients were highly positive about their experience with buprenorphine-naloxone (Suboxone) and preferred it over methadone because buprenorphine-naloxone (Suboxone) helped the patients "think more clearly", improve their well-being, concentration, reduced cravings, had less of a stigma and

decreased life-threating adverse side effects. As a result, about 57% of the patients would consider buprenorphine-naloxone (Suboxone) for future treatment.

Tanner et el. (2011) compared methadone and Suboxone in applied treatment. Researchers collected two sets of data: from open narrative accounts of those successfully detoxified with Suboxone (buprenorphine-naloxone combination) and structured interviews with clients comparing Suboxone and methadone. The study showed clients reported more clarity of thinking while on Suboxone. Suboxone was associated with increased confidence and lower stigma than methadone.

Wikner et al. (2014) conducted a study that compared mortality rates related to prescription methadone and buprenorphine. Researchers concluded that the mortality rate was slightly increased in methadone users: from 19 to 81 cases for methadone and to 49 cases for buprenorphine. This difference in mortality rates can be explained in that methadone is a full antagonist of mu-opioid receptors and block opioid receptors and causes difficulties to reverse respiratory depression if it does occur. Therefore, researchers concluded that there is a higher prevalence of drug use death associated with methadone use. Repelli et al., (2007) investigated recovery-conductive effects associated with buprenorphine-naloxone. They concluded that buprenorphine-naloxone is associated with improved cognitive performance compared with methadone use.

Mattick, Kimber, Breen, & Davoli (2008) compared buprenorphine with methadone and a placebo, based on 24 randomized clinical trials. This study showed that there was no difference in suppression of opioid use with the use of buprenorphine compared with methadone, but the study showed that buprenorphine is better than methadone in MAT retention rate. In addition, researchers investigated the optimal dose that would be necessary for retention in opioid treatment. They concluded that medium

dose (8-15 mg) buprenorphine would suppress heroin more effectively than low dose (2-4 mg) methadone with no difference in retention of the patients. Mattick et al., (2008) concluded that buprenorphine at medium and high doses (16 mg) can reduce heroin use effectively, compared with a placebo, although it is less effective than methadone, especially if methadone is prescribed at adequate dose levels between 60 mg and 120 mg per day. The authors concluded that only medium and high dose buprenorphine suppressed heroin use significantly above placebo levels.

Magura (2009) has suggested one potential benefit of buprenorphine over methadone in that it results in less onerous withdrawals after a period of maintenance and that buprenorphine may have a lower dependence in comparison with methadone. Compared to methadone, buprenorphine provides a more effective opioid receptor block and reduces the effect of withdrawals (Pinto, Rumball, & Holland (2008).

Fiellin et al., (2006) report that patients have a higher satisfaction rating with treatment of buprenorphine-naloxone because they visit clinics less frequently for medication dispensing: every three days for buprenorphine-naloxone and every day for methadone. Pinto et al., (2008) reports that patients prefer to stay on buprenorphine rather than on methadone for maintenance treatment because it provides reduced cravings. Tenner et al., (2011), compared the perception of methadone and buprenorphine-naloxone users. The buprenorphine-naloxone users reported a greater clarity of thinking and self-efficacy compared with methadone users (Rapelli et al., 2007); less intense side effects (O'Connor & Fiellin, 2000); improved decision-making (Pirastu et al., 2005), rapid stabilization (Doran et al., 2003), and fewer drug interactions (McCance-Katz et al., 2006).

According to Bart (2012), buprenorphine-naloxone (Suboxone) mimics the narcotic effects of heroin and painkilling opiates without the addictive high. The medication can lower addicts' risk of overdose death by more than 50% and their risk of relapse by more than 50%. After four years of the buprenorphine-naloxone (Suboxone) treatment, one third of the patients completely stopped the use of opioids and no longer needed buprenorphine-naloxone (Suboxone) to maintain their sobriety.

According Bart (2012), people who take methadone and buprenorphine-naloxone (Suboxone) are more able to keep a job, avoid relapses and gradually reduce their need to continue using heroin and other illegal/illicit drugs. Therefore, the above findings led to the conclusion that buprenorphine-naloxone (Suboxone) would be a more desirable drug to be used in MAT programs.

According to McKeganey, Russell & Cockayne (2013), the prescribing of narcotic substitute medications indicated for opiate dependence is a key element for recovery. In early 1970, President Richard Nixon conscripted methadone into the national war on drugs (Satel, 2014). The Obama Administration unveiled a bold $1.1 billion proposal that encouraged the use of medications like buprenorphine to treat people with addiction. It also allowed physicians, nurse practitioners, and physician assistants to receive the proper training to prescribe the drug (The American Society of Addiction Medicine, 2018). The challenge of MAT is to facilitate patients' cessation from opiate use and decrease their risk of death when combined with street opioids.

The conceptual and theoretical framework

Rogers's Science of Unitary Human Being emphasizes the constant interaction of human and environment and can be used in regards to opioid addiction and recovery.

Roger's (1970) work described four concepts within her theory: human being, environment, health, and nursing.

Roger's view of unitary "human being" is summarized in three principles of homodynamic: helicy, resonancy, and integrality (Rogers, 1992). *Helicy* is a principle that describes the continuous evolution of energy and can be associated with a human being's desire to use drugs in order to escape their harsh reality. *Resonancy* is a frequency and reflects the continuous variability of human energy as it changes. *Resonancy* in context to substance abuse can be related to a human being's rate of use of illegal substances. *Integrality* or the continuous interaction of an individual and the environment in regards to substance abuse, illustrates the adherence to a Medication Assisted Treatment (MAT) program.

This current study is designed to explore the effects of the MAT program in regard to desires (cravings) for opioids, frequency of use, and medical and legal consequences of opioid use. According to Rogers's theory (1992), environment is "an irreducible, pandimensional, negentropic energy field" and "man and environment are continuously exchanging matter and energy with one another" (Rogers, 1970, p.54). This current study will explore the effects of MAT on man's (client's) social functioning and adaptation to negative factors. Rogers viewed health and illness as a part of a continuum (Rogers, 1970). This current study will determine the effects of MAT on health risk behavior with potential consequences such as HIV, hepatitis, and STDs.

The concept of nursing is viewed as both the art and science of providing sensitive care via the interaction between human beings and the environment. This concept can be explored through a client's perception of a MAT program (acceptability)

and the provider's perception on the degree of capability of implementation of the MAT program (feasibility).

Rogers's Science of Unitary Human Being emphasizes the constant interaction of humans and their environment. The concepts of the Science of Unitary Human Being of Martha Roger's theory can be used in this MAT program (environment) on humans as an energy field via the use of Suboxone and intensive outpatient group therapy.

Section II

The Journal of Psychosocial Nursing and Mental Health Services

A. Journal Scope

The Journal of Psychosocial Nursing and Mental Health Services is a peer-reviewed journal for mental health nurses in a variety of community and institutional settings.

B. Journal Aim

The Journal of Psychosocial Nursing and Mental Health Services provides the most up-to-date, practical information available for today's psychosocial nurse, including short contributions about psychopharmacology, mental health care of older adults, and child/adolescent disorders and issues.

The Feasibility and Acceptability of Using a Medication Assisted Treatment (MAT) Program with Suboxone for Patients in a Community Behavioral Clinic

Abstract

Objectives: To determine the effectiveness, adherence, and acceptability/feasibility of a MAT program with Suboxone for three months. **Methods:** Clients with Opioid Use Disorder completed the Circumstances, Motivation, Readiness questionnaire (CMR) and the National Institute on Drug Abuse (NIDA) screen. The NIDA quick screen was re-administered at 1-, 2- and 3-months. The CMR scale assessed the acceptability of the MAT program, the NIDA quick screen was used to determine the adherence, effectiveness, and feasibility.

Results: All clients found that the use of Suboxone in this program was effective. Wilcoxon signed-rank test showed the same significant results ($p=0.046$) for all three evaluation periods. The NIDA quick screen results showed that all participants adhered to the MAT program.

Conclusion: Although the study showed that the treatment with Suboxone is an effective method of opioid treatment, more studies with a larger sample size and long-term follow-up evaluations are recommended.

Key words:

Medication Assisted Treatment, MAT, Suboxone, buprenorphine, opioid use disorder, CMR, NIDA

Introduction

Abuse of prescription opioids has become a significant public health problem in the United States (Steele & Cunningham, 2012). The misuse of prescription drugs is the leading cause of opioid overdoses in the past decade. The rate of opioid-overdose related deaths has quadrupled over the past 17 years, fueled by the over prescription of painkillers and the proliferation of heroin and synthetic opioids (The Centers for Disease Control and Prevention, 2017).

Approximately 7.1 million people met the criteria for an illicit drug use disorder in the past year. Consequently, substance misuse is the most prevalent cause of adolescent morbidity and mortality in the United States (Substance Abuse and Mental Health Services Administration, 2017). In 2015, there were 33,091 overdose deaths involving prescription opioid medications (the Center for Disease Control and Prevention, 2018). This is equivalent to one death every 16 minutes (SAMHSA, 2017).

The addiction to prescribed opioids is associated with poor academic performance, school truancy, unemployment, teen pregnancy, spread of sexually transmitted diseases, HIV, hepatitis, crime, driving under the influence, and related motor vehicle accidents (Sussman & Ames, 2008). In 2009, it was estimated that the total overall cost of substance abuse in the United States, including lost productivity and health and crime-related costs, exceeded $600 billion (National Institute on Drug Abuse, 2012). The estimated annual cost for substance abuse treatment in the United State ranges from $16 to 18 billion. Without treatment, addicts in search of their next hit, turn instead to the black market, which responds to the surging demand with dangerous counterfeit opioids that contribute to even more deaths. Study after study supports the effectiveness of drug-based therapies for opiate addiction (Stotts, Dodrill, & Kosten, 2009) & (Bart, 2012).

Only a small percentage of the 2 million people in America with opioid-use disorders get Medication Assisted Treatment (MAT), which is a public health priority in the reduction of opioid use (Murthy, 2016). There are two types of commonly prescribed opiate substitute medications in the USA: methadone and buprenorphine-naloxone (Suboxone). Originally, methadone and buprenorphine were used as analgesic agents. Methadone has been used for treating opioid dependence since 1960, and buprenorphine (Subutex) was approved in Sweden for treating opioid dependence in 1999. The combination of buprenorphine and naloxone was developed and introduced in 2006 under the name Suboxone. Methadone is a full opioid antagonist; buprenorphine is a partial mu-opioid receptor agonist (Wikner et al., 2014). Buprenorphine-naloxone (Suboxone) is a valuable, alternative option to methadone in treatment of opiate dependence, because buprenorphine as a synthetic opiate enables the consumer to avoid the unpleasant feelings of drug withdrawal, and naloxone effectively counteracts the effects of opioids. Suboxone contains opioid antagonist naloxone and buprenorphine in a ratio of 1-part naloxone to 4-parts buprenorphine and is designed to limit the potential for misuse and diversion (Magura, 2009).

Naloxone as a part of Suboxone, has a low bioavailability when taken sub-lingually and therefore has no effect on the potential for mis-use. If Suboxone is injected, naloxone enters the systemic blood circulation which allows it to reach the opioid receptors to block them and negate the effects of any agonist, including buprenorphine. This can cause acute opioid withdrawal symptoms which makes the misuse of buprenorphine- naloxone (Suboxone) very unattractive (Tanner et al., 2011). In relation to dosing, buprenorphine in combination with naloxone, has a longer duration of effect. According to Correia, Walsh, Bigelow, & Strain (2006), the effects of buprenorphine in

the buprenorphine/naloxone combination are long-acting, with effects lasting for up to 98 hours.

Opioid addiction changes brain chemistry. Opioid abusers struggle to overcome the effects of these changes (e.g. cravings, stress, and psychological conditioning) during the process of recovery. Medication such as Suboxone acts on the same brain structures as an opioid but with neuro-protective effects (Kosten & George, 2002). This study is important because we need to find a way to help control cravings, along with the severity of withdrawal symptoms from opiates.

According to the National Institute of Drug Abuse (2016), nearly all of the U.S. have insufficient treatment capacity to provide MAT programs to all of the patients with an opioid use disorder. The purpose of the study was to investigate a short term (three months) effectiveness, adherence, and acceptability/feasibility of a MAT program with Suboxone.

The effectiveness of MAT is important because it prevents opioid abuse, opioid-related deaths, criminal activities, and transmission of infectious diseases. Adherence is important because it improves treatment delivery and helps providers understand which treatments will be the most effective for specific patients. Acceptability/feasibility is important because it defines the tolerability and convenience to the treatment in the context of social functioning (NIDA, 2016).

Methodology

This study was conducted in a Mental Health clinic in Huntsville, Alabama. This clinic recently received a grant to help the community and provide free Suboxone to clients who do not have insurance. While the clinic was recruiting clients for their grant

as a routine process, the PI collected data for the purpose of this study without interfering with the process of treatment.

Institutional Review Board (IRB) approval was received from the University of Alabama in Huntsville. We used the definition of DSM-5 (Diagnostic and Statistical Manual of Mental Disorders), fifth edition, to identify Opioid Use Disorder in participants. The participants received a $10 value gift card ($30 total) upon completion of each monthly follow-up questionnaire.

The CMR questionnaire (the Circumstances, Motivation, Readiness, and Suitability (CMR) scale) was completed by the participants at the beginning of the study only to measure motivation and readiness for treatment and predict retention in treatment among abusers of illicit drugs. The National Institute on Drug Abuse (NIDA) quick screen questionnaire was used for the screening of drug use. This questionnaire was used to determine the frequency of use of the nine most common substances (cannabis, cocaine, prescription drugs, methamphetamines, inhalants, sedatives or sleeping pills, hallucinogens, street opioids, and prescribed opioids). The PI used this NIDA tool before client's enrollment in the MAT program to determine participants' eligibility. This tool was used every month for a total of three months after starting the MAT program. The participants received Suboxone treatment as directed by the drug manufacturer. The use of the NIDA quick screen questionnaire allows healthcare providers to understand the correlation between the use of Suboxone and the use of these drugs, and provide population sensitive care. Adherence was measured through the patient's self-report, the electronic database history for refills, and drug screening for monitoring the components of Suboxone in the patient's system.

Data Analysis

The statistical analysis was performed by using the Statistical Package for Social Sciences (SSPS) version 24.0. Clients' demographic data was analyzed to descried samples characteristics such as the age, gender, race, marital status, employment status, and educational level. Client's responses on CMR scale and NIDA questionnaire were analyzed through the use of descriptive and non-descriptive analysis of selected variables.

Results

Table 1 depicts clients' demographic data. Five individuals, four men and one woman were recruited to participate in the study within the available period. The sample consisted 20% adults 18 to 24 years of age, 40% adults 25 to 35 years of age, 40% adults 35 to 44 years of age. Their mean age was 29.8. Forty percent were married, 40% were single, and 20% were living with their partner. Their race consisted of all White/Caucasians (100%). Employment status consisted of 40% unemployed, 20% employed full-time, 20% employed part-time, 20% had odd jobs. The education level consisted of 40% of high school dropout, 40% GED, and 20% had attended some college.

All five participants stated that the major attraction to join the MAT program was to receive free medication (Suboxone) and free medical appointments. According to the clients' responses in regards to their circumstances to join the MAT program 60% of participants strongly agreed and 40% agreed that they will go to jail if they did not enroll in the treatment program. All (100%) of participants agreed that their family will not let them live at home if they did not come for treatment (Table 2).

Three participants were unemployed due to different reasons and all were uninsured. All reported opioids as their drug of choice and all had a long history starting at the age of 14-15 to the present time period of substance abuse. Two of these clients

were obtaining Suboxone on the street for $15 per 8mg/2mg & $12 for 4mg/1 mg. One participant was receiving it from his primary care provider. Two of them were combining prescription opioids with intravenous street heroin sporadically. One client was concurrently using prescription opioids with cannabis, sedatives, prescription stimulants, and street methamphetamines, and two others combined prescription opioids with cannabis.

Case Descriptions

The first client is a 26-year-old male and began using drugs at the age of 14. His addictions include alcohol, cannabis, crystal meth and unprescribed opioids (Lortab/Suboxone/Fentanyl). He was diagnosed with hepatitis C and had made five unsuccessful attempts in substance abuse treatment programs. He has multiple arrests (12+) related to public intoxication, burglary, drug paraphernalia, and promotion of prison contraband, and also incarceration for a probation violation. He reported Fentanyl as his drug of choice. He reported difficulties in obtaining unprescribed opioids on the street and buying crystal meth (IV/smoked/snorted) to fix his cravings for opioids. He joined the MAT program to legalize his habit and keep him from overdosing.

The second client is a 32-year-old male and was referred to this program by his parole officer after failing a drug test. This client's history of substance abuse includes: cannabis, unprescribed opioids (Lortab, Percocet, morphine, Roxicodone, Oxycontin, and Suboxone), and unprescribed benzodiazepines beginning at the age of 15. This client has had multiple arrests for burglary, theft, and obstruction of justice.

The third client is a 22-year-old female. This client's history of substance abuse includes: cannabis, unprescribed benzodiazepines, unprescribed opioids (hydrocodone & oxycodone), streets opioids (heroin), and cocaine "coke". She began using drugs at the

age of 15 after her boyfriend died from a self-inflicted gunshot wound after cooking crystal meth. This client joined the program because she couldn't afford another prescriber of Suboxone.

The forth client is a 39-year-old male. This client's history of substance abuse includes: cannabis, crystal meth "ice", unprescribed benzodiazepines, unprescribed opioids (Lortab, Norco, Oxycodone) which he began to use in his early 20's. He decided to join this medication assisted treatment program because he was unable to afford opioids on the street.

The fifth client is a 30-year-old male. This client's history of substance abuse includes: cannabis, unprescribed benzodiazepines, unprescribed opioids (Roxicodone), street opioid (heroin) which he began to use at the age of 16. The client had made three unsuccessful attempts in substance abuse treatment programs with Suboxone and Methadone. He decided to join this medication assisted treatment program because he was unable to afford treatment by other prescribers of Suboxone.

Objective 1

Can the implementation of a Medication Assisted Treatment (MAT) program with Suboxone for three months, help substance abusers decrease the use of illegal/illicit substances? (effectiveness)

All of the clients, except one, refrained from taking illegal and prescribed controlled substances. This client admitted to the use of prescribed benzodiazepine (Clonazepam), despite continuous warning about the potential life threating of drug interactions between Suboxone and Clonazepam (Table 5-8).

The effectiveness of the MAT program with Suboxone was evaluated for three months via a non-parametric Wilcoxon signed-rank test. Independent Variable: (Time):

pretest (before treatment with Suboxone) and posttest (in 1, 2, and 3 months after initiation of treatment). Dependent Variable: the use of prescribed and non-prescribed drugs (stimulants, sedatives, and opioids) and illicit drugs (cannabis, cocaine, methamphetamine, inhalants, hallucinogens, and heroin).

This test was conducted to evaluate whether a statistical difference exists between substance use (prescribed and non-prescribed drugs: stimulants, sedatives, and opioid) and illicit drugs (cannabis, cocaine, methamphetamines, inhalants, hallucinogens, and heroin) before and after the treatment with Suboxone. Descriptive statistics prior to treatment showed n=5, mean=1.00, SD=0.00; after 1month of treatment n=5, mean= 1.80, SD=0.447, p=0.046; after 2 months of treatment n=5, mean=1.80, SD=0.447, p=0.046; after 3 months of treatment n=5, mean=1.80, SD=0.447, p=0.046. The results of the NIDA quick screen responses to the participants' answers to their combined drug use were compared. They were determined to be the same for all three months and to be significant ($p=0.046/p<0.05$). This can be explained because one participant continued to use benzodiazepine throughout the course of the study. Other participants refrained from the intake of any drugs except the prescribed Suboxone.

Objective 2

Do the clients adhere to the MAT program?

All participating clients adhered to the MAT program. Adherence was measured through the patient's verbal interview with provider (each participant was asked, "Are you adherent to the intake of Suboxone? Do you take Suboxone as prescribed"?), the electronic database history for refills, and drug screening for monitoring the components of Suboxone in the patient's system.

Objective 3

Is the use of the MAT program acceptable/feasible for clients?

The CMR questionnaire was completed by each client at the beginning of the study. The questionnaire expanded the clients' beliefs of their motivation and readiness (M and R) for treatment with Suboxone. This was determined via the client's responses to the Motivation and Readiness (M and R) scale. The 12 items in the scale were used to measure motivation (the desire to quit using drugs) and readiness for treatment (the acceptance of the need for treatment in order to cease using drugs). The motivation and readiness scores consisted of 12 items (five motivation items & seven readiness items).

All clients felt that their drug use is a very serious problem in their life (a motivational factor needing to change). Eighty percent of participants strongly agreed and 20% agreed that they do not like themselves because of their drug use (motivational factor). Eighty percent of the participants strongly agreed and 20% agree with the statement that if they do not change, their life will keep getting worse (motivational factor). Sixty percent of participants strongly agreed and 20% agreed with the statement that they feel bad about their drug use and the way it has been hurting a lot of people (motivational factor). All participants strongly agreed that it is more important for them than anything else to stop using drugs (a readiness factor needing to change) and all strongly agreed that they are ready to deal with themselves in treatment (readiness factor). All strongly agreed that they have to do whatever they have to do to get their life straightened out (readiness factor). Eighty percent of them strongly agreed and 20% agreed that they do not see any other choice for help at this time except through some kind of treatment (readiness factor). All participants strongly agreed that they cannot stop their drug use with the help of friends, family, or religion and they need some kind of

treatment program (readiness factor). Eighty percent strongly agreed and 20% agreed that they are tired of using drugs and are ready to change (readiness factor). All agreed that they are willing to enter treatment as soon as possible (readiness factor).

The potential value for the combined motivation-readiness score is from 12-60 with a higher score indicating greater motivation and readiness for treatment. The patients had the following scores: 77/90, 72/90, 75/90, 70/90, 52/90 with mean score being 68.6.

The feasibility of the MAT program was assessed via the participants' responses to questions related to the use, access, helpfulness, and future use of Suboxone. All of the participants reported that they will continue the use of Suboxone because it is helpful to them to control their cravings to opioids and other substances, it is easy to use (oral intake), and easy to access through the pharmacy.

Discussion

Based on the results of the study, the implementation of a MAT program with Suboxone might change the life of many adult substance abusers. Suboxone can be helpful for the treatment of opioid use disorder. Several studies were conducted to investigate the effectiveness of Suboxone in decreasing the use of illegal substances. McKeganey et al., (2013) investigated the efficacy of buprenorphine-naloxone (Suboxone) treatment in preventing relapses to heroin use. The researchers showed that the continuous use of Suboxone was highly effective for both short-term and long-term abstinence. Pinto et al., (2008) reports patient's preference towards buprenorphine rather than methadone because of the potential in the reduction of cravings. Bart (2012) states that Suboxone was more desirable in reducing the desire for heroin and other illegal/illicit drugs.

Few researches investigated adherence to buprenorphine (the component of Suboxone). Mattick et al., (2008) compared buprenorphine with methadone and a placebo. They concluded that buprenorphine is better than methadone in the retention to treatment. Hser et al (2014) investigated treatment retention among patient randomized to buprenorphine/naloxone compared to methadone. They concluded that retention in treatment with methadone is better due to better provision of clients (daily provision in methadone clients vs. weekly provision in Suboxone client). Sittambalam, Vij, & Ferguson (2014) investigated adherence to buprenorphine in outpatient settings. They concluded that Suboxone is an effective treatment method for heroin addiction and is a viable outpatient therapy option but individualized counseling is a main component in obtaining long term abstinence.

Hill et al., (2015) investigated acceptability and feasibility through patient's comments on the use of Suboxone. The researchers concluded that patients preferred buprenorphine-naloxone (Suboxone) over the other commonly used treatment drug (methadone) because of cognitive improvements. Pirastu et al., 2005 compared the perception of methadone and buprenorphine-naloxone users and showed that clients prefer Suboxone because of improved decision-making capacity.

McCance-Katz et al., (2006) compared the perception of methadone and buprenorphine-naloxone users. The authors concluded that clients prefer Suboxone because of fewer drug interactions. Rapelli et al., (2007) investigated the effects associated with the use of buprenorphine-naloxone. They concluded that buprenorphine-naloxone is associated with improved cognitive performance compared with methadone use.

The client's motives to join this MAT program are controversial. They verbalized the need to join this MAT program in order to obtain free and legalized medication (Suboxone) for an indefinite amount of time. Some limitations of this study include: short term follow up (three months vs. multiple years), the small sample size, the lack of available and/or reliable data, the belief that the patient's answers were based on their subjective perception (self-reported data) of expectations rather than objective data, and the insufficient period of performance of this study.

Conclusion

There are some benefits for the use of Suboxone in those who remained in the program for the three months period (the length of the program). The effectiveness of the program was determined by the participants refraining from the use of illegal substances. The adherence to the program was determined through the patient's self-report, the electronic database history for refills, and drug screening for monitoring the components of Suboxone in the patient's system. The feasibility of the program was determined by the client's responses about the use, access, helpfulness, and future use of Suboxone. A MAT program with Suboxone is recommended by most providers in regards to abstinence from heroin use and other illegal/illicit substances, improvement of cognition, and the overall quality of life, and social functioning.

References

Barnett, P.G. (2009). Comparison of cost and utilization among buprenorphine and methadone patients. *Addiction, 104*(6), 982-992. doi.org/10.1111/j.1360-0443.2009.02539.x

Bart, G. (2012). Maintenance medication for opiate addiction: The foundation of recovery. *Journal of Addictive Diseases, 31*(3), 207–225. http://doi.org/10.1080/10550887.2012.694598

Compton, M. (1989). A Rogerian view of drug abuse: Implication for nursing. *Nursing Science Quarterly, 2*(2),98-105. doi: 10.1177/089431848900200209

Correia, C., Walsh, S.L., Bigelow, G. E., & Strain, E. C. (2006). Effects associated with double-blind omission of buprenorphine/naloxone over a 98-h period. Psychopharmacology, 189, 297-306. doi:10.1007/s00213-006-0571-4.

Doran, C.M., Shanahan, M., Mattick, R. P., Ali, R., White, J. Bell, J. (2003) Buprenorphine versus methadone maintenance: A cost-effectiveness analysis. *Drug Alcohol Dependence, 71* (3), 295-302. doi.org/10.1016/S0376-8716(03)00169-8.

Fiellin, D., Pantalon, M.V., Chawarski, M. C., Moore, B.A., Sullivan, L.E., O'Connor, P.G., & Schottenfeld, R.S. (2006). Counseling plus buprenorphine-naloxone maintenance therapy for opioid dependency. *The New England Journal of Medicine*, 355(4), 365-374. doi:10.1056/NEJMoa055255

Hill, D.R., Conroy, S., Afzal, A., Lang, D., Steele, S., & Campbell, D. (2015). A comparison of methadone and buprenorphine-naloxone as opioid substitution therapy: The patient perspective in NHS Lanarkshire. *Journal of Substance Use, 20*(3), 168-177. doi.org/10.3109/14659891.2014.894589

Hser, Y.-I., Saxon, A. J., Huang, D., Hasson, A., Thomas, C., Hillhouse, M., Jacobs, P., Teruya, C., McLaughlin, P., Wiest, K., Cohen, A., Ling, W. (2014). Treatment retention among patients randomized to buprenorphine/naloxone compared to methadone in a multi-site trial. *Addiction (Abingdon, England)*, *109*(1), 79–87. Retrieved from http://doi.org/10.1111/add.12333

Kosten, T. R., & George, T. P. (2002). The neurobiology of opioid dependence: Implications for treatment. *Science & Practice Perspectives*, *1*(1), 13–20. doi: 10.1151/spp021113

Lee, S., Klein-Schwartz, W., Welsh, C., & Doyon, S. (2013). Toxicology: Medical outcomes associated with nonmedical use of methadone and buprenorphine. *Journal of Emergency Medicine, 45,* 199-205. Doi: 10.1016/j.jemermed.2012.11.104

Magura, S. (2009). What more do we need to know about medication-assisted treatment for prescription opioid abusers*? Addiction,* 104, 784-785. doi.org/10.1111/j.1360-0443.2009.02581.x

Magura, S., Lee, J.D., Hershberger, J., Joseph, H., Marsch,L., Shropshire, C., Rosenblum, A. (2009). Buprenorphine and methadone maintenance in jail and post-release: A randomized clinical trial. Drug and Alcohol Dependence, 1(99), 222-230. doi: 10.1016/j.drugalcdep.2008.08.006

Mattick, S., Kimber., J., Breen, C., & Davoli, M., (2008). *Buprenophtine maintenance versus placebo or methadone maintenance for opioid dependence (review).* Retrieved from ttp://onlinelibrary.wiley.com/doi/10.1002/14651858.CD002207.pub4/abstract;jsessionid=2EBBAB795209741210E45942C4664964.f02t04

McCance-Katz, E.F., Moody, D.E., Morse,G.D., Friendland.G., Pade, P., Baker, J., Alvanzo, A., Smith., P., Oqundele, A., Jatlow, P., &Rainey, P. M. (2006). Interactions between buprenenorphrine and antivirals. The nonnucleoside reverse-transcriptase inhibitors efavirnez and delavirdine. *Clinical infectious diseases, 43*, 224-234. doi: 10.1086/508187

McKeganey, N., Russell, C., & Cockayne, L. (2013). Medically assisted recovery from opiate dependence within the context of the UK drug strategy: Methadone and Suboxone (buprenorphine–naloxone) patients compared. *Journal of Substance Abuse Treatment*, *44*97-102. doi:10.1016/j.jsat.2012.04.003

Murthy, V. (2016). Our addiction crisis can be solved. *Time*, *188*(16/17), 53. Retrieved from http://time.com/4521562/2016-election-opioid-epidemic/

Otiashvili, D., Piralishvili, G., Sikharulidze, Z., Kamkamidze, G., Poole, S., & Woody,G. E.(2013). Methadone and buprenorphine-naloxone are effective in reducing illicit buprenorphine and other opioid use, and reduction HIV risk behavior-outcomes of a randomized trial. *Drug and Alcohol Dependence, 133*,376-382. doi: 10.1016/j.drugalcdep.2013.06.024

Pinto, H., Rumball, D., & Holland, R. (2008). Attitudes and knowledge of substance misusers regarding buprenorphine and methadone maintenance therapy. *Journal of Substance Use*, 13, 143-153. doi.org/10.1080/14659890701639808

Pirastu, R., Fais, R., Messina, M., Bini,V., Spiga, S., Falconieri, D., & Diana, M. (2005). Impaired decision-making in opiate-dependence subjects: Effect of pharmacological therapies. *Drug and Alcohol Dependence*, 83, 163-168. doi: 10.1016/j.drugalcdep.2005.11.008

Rapelli, P., Fabritius, C., Alho., H., Salaspuro, M., Wahlbeck., K., & Kalska, H. (2007). Methadone vs. buprenorphine/naloxone during opioid substitution treatment: A naturalistic comparison of cognitive performance relative to healthy controls. *BMC Clinical Pharmacology, 7*, 1-10. doi: 10.1186/1472-6904-7-5

Rogers, M. E. (1970). *An introduction to the theoretical basis of nursing.* Philadelphia, PA: F.A. Davis.

Rogers, M. E. (1992). Nursing science and the space age. *Nursing Science Quarterly, 5,* 27-34.

Satel, S. (2014). Happy Birthday, Methadone! *Washington Monthly*, *46*(11/12), 8.

Sittambalam, C. D., Vij, R., & Ferguson, R. P. (2014). Buprenorphine Outpatient Outcomes Project: Can Suboxone be a viable outpatient option for heroin addiction? *Journal of Community Hospital Internal Medicine Perspectives*, *4*(2), 10.3402/jchimp.v4.22902. http://doi.org/10.3402/jchimp.v4.22902

Sheff (2017). *Trump's war on drug users: Column.* Retrieved from https://www.usatoday.com/story/opinion/2017/05/05/trump-war-drug-mental-health-reform-column/101252422/

Steele, A., & Cunningham P. (2012). A comparison of suboxone and clonidine treatment outcomes in opiate detoxification. *Archives of Psychiatric Nursing, 26*(4), 316-323. doi: 10.1016/j.apnu.2011.10.006

Stotts, A. L., Dodrill, C. L., & Kosten, T. R. (2009). Opioid dependence treatment: Options in pharmacotherapy. *Expert Opinion on Pharmacotherapy*, *10*(11), 1727–1740. http://doi.org/10.1517/14656560903037168

Substance Abuse and Mental Health Services Administration (SAMHSA) (2017). Alcohol, Tobacco, and other drugs. Retrieved from https://www.samhsa.gov/atod).

Sussman, S., & Ames, S.L., (2008). *Drug abuse: Concepts, prevention and cessation.* New York: Cambridge University Press.

Tanner, G. R., Bordon, N., Conroy, S., & Best, D. (2011). Comparing methadone and Suboxone in applied treatment settings: The experiences of maintenance patients in Lanarkshire. *Journal of Substance Use*, *16*(3), 171-178. doi:10.3109/14659891.2010.526480

The American Society of Addiction Medicine (2018). *Summary of the comprehensive addiction and recovery act.* Retrieved from https://www.asam.org/advocacy/issues/opioids/summary-of-the-comprehensive-addiction-and-recovery-act

The Centers for Disease Control and Prevention (2018). *Overdose deaths involving opioids, cocaine, and psychostimulants – United States, 2015-2016*. Retrieved from www.cdc.gov/mmwr/volumes/67/wr/mm6712a1.htm

The Centers for Disease Control and Prevention (2017). *Prescription opioid data.* Retrieved from https://www.cdc.gov/drugoverdose/data/prescribing.html

The Institute of Drug Abuse (2012). *Understanding drug abuse and addiction.* Retrieved from https://www.drugabuse.gov/sites/default/files/drugfacts_understanding_addiction_final_0.pdf

The National Institute of Drug Abuse (2016). *Effective treatments for opioid addiction.* Retrieved from https://www.drugabuse.gov/publications/effective-treatments-opioid-addiction/effective-treatments-opioid-addiction

Wikner, B. N., Öhman, I., Seldén, T., Druid, H., Brandt, L., & Kieler, H. (2014). Opioid-related mortality and filled prescriptions for buprenorphine and methadone. *Drug & Alcohol Review*, *33*(5), 491-498.doi: 10.1111/dar.12143

World Health Organization (2017). *The ASSIST project – Alcohol, smoking and substance involvement screening test*. Retrieved from http://www.who.int/substance_abuse/activities/assist/en/

Table 1. Demographics (N=5)

Variable		n	%
Age	18 to 24 years	1	20
	25 to 34 years	2	40
	35 to 44 years	2	40
Marital Status	Single	2	40
	Married	2	40
	Living with partner	1	20
Race	Black/African American	0	0
	White/Caucasian	5	100
	Hispanic/Latino	0	0
Employment	Employed Full time	1	20
	Employed Part time	1	20
	Odd jobs	1	20
	Unemployed	2	40
Educational Level	High school drop out	2	40
	GED	2	40
	Some College	1	20

Table 2. Distribution of common responses to questions addressing circumstances

Question	Common responses	n	%
I am sure that I would go to jail if I did not enter treatment	strongly agree	3	60
	agree	2	40
	disagree	0	0
	strongly disagree	0	0
I am sure that I would have come to treatment without the pressure of my legal involvement	strongly agree	3	60
	agree	2	40
	disagree	0	0
	strongly disagree	0	0
I am sure that my family will not let me live at home if I did not come to treatment	strongly agree	5	100
	agree	0	0
	disagree	0	0
	strongly disagree	0	0
I believe that my family relationship will try to make me leave treatment after a few months	strongly agree	0	0
	agree	0	0
	disagree	5	100
	strongly disagree	0	0
I am worried that I will have serious money problems if I stay in treatment.	strongly agree	4	80
	agree	1	20
	disagree	0	0
	strongly disagree	0	0
Basically, I feel I have too many outside problems that will prevent me from completing treatment (parents, spouse relationship, children, loss of job, loss of income, loss of education, family problems, loss of place to live).	strongly agree	1	20
	agree	4	80
	disagree	0	0
	strongly disagree	0	0

Table 3 Distribution of common responses to questions addressing motivation

Question	Common responses	n	%
Basically, I feel that my drug use is a very serious problem in my life.	strongly agree	5	100
	agree	0	0
	disagree	0	0
	strongly disagree	0	0
Often, I don't like myself because of my drug use.	strongly agree	4	80
	agree	1	20
	disagree	0	0
	strongly disagree	0	0
Lately, I feel if I don't change, my life will keep getting worse.	strongly agree	4	80
	agree	1	20
	disagree	0	0
	strongly disagree	0	0
I really feel bad that my drug use and the way I have been living has hurt a lot of people.	strongly agree	3	60
	agree	2	40
	disagree	0	0
	strongly disagree	0	0
It is more important to me than anything else that I stop using drugs	strongly agree	5	100
	agree	0	0
	disagree	0	0
	strongly disagree	0	0

Table 4 Distribution of common responses to questions addressing readiness

Question	Common responses	n	%
I don't really believe that I have to be in treatment to stop using drugs, I can stop it anytime.	strongly agree	0	0
	agree	0	0
	disagree	5	100
	strongly disagree	0	0
I came to this program because I really feel that I am ready to deal with myself in treatment.	strongly agree	0	
	agree	5	100
	disagree	0	
	strongly disagree	0	
I'll do whatever I have to do to get my life straightened out.	strongly agree	5	100
	agree	0	0
	disagree	0	0
	strongly disagree	0	0
Basically, I don't see any other choice for help at this time except some kind of treatment.	strongly agree	4	80
	agree	1	20
	disagree	0	0
	strongly disagree	0	0
I don't really think I can stop my drug use with the help of friends, family or religion, I really need some kind of treatment.	strongly agree	5	100
	agree	0	0
	disagree	0	0
	strongly disagree	0	0
I am really tired of using drugs and want to change, but I know I can't do it on my own.	strongly agree	4	80
	agree	1	20
	disagree	0	0
	strongly disagree	0	0
I'm willing to enter treatment as soon as possible.	strongly agree	5	100
	agree	0	0
	disagree	0	0
	strongly disagree	0	0

Table 5 Client self-reported drug use prior to the treatment with Suboxone (N=5)

Substance	Yes	%
Cannabis (marijuana, pot, grass, hashish)	3	60
Cocaine (coke, crack)	1	20
Prescription stimulant (Ritalin, Concerta, Adderall, diet pills)	0	0
Methamphetamine (speed, crystal meth, ice)	1	20
Inhalants (nitrous oxide, glue, gas, paint thinner)	0	0
Sedatives or sleeping pills (Valium, Ativan, Xanax, Librium)	3	60
Hallucinogens (LSD, acid, mushrooms, PCP, ecstasy)	0	0
Street opioids (heroin, opium)	2	40
Prescription opioids (fentanyl, oxycodone, Percocet)	5	100

Table 6 Client self-reported drug use 1 month after treatment with Suboxone (N=5)

Substance	Yes	%
Cannabis (marijuana, pot, grass, hashish)	0	0
Cocaine (coke, crack)	0	0
Prescription stimulant (Ritalin, Concerta, Adderall, diet pills)	0	0
Methamphetamine (speed, crystal meth, ice)	0	0
Inhalants (nitrous oxide, glue, gas, paint thinner)	0	0
Sedatives or sleeping pills (Valium, Ativan, Xanax, Librium)	1	20
Hallucinogens (LSD, acid, mushrooms, PCP, ecstasy)	0	0
Street opioids (heroin, opium)	0	0
Prescription opioids (fentanyl, oxycodone, Percocet, hydrocodone)	0	0

Table 7 Client self-reported drug use 2 months after treatment with Suboxone (N=5)

Substance	Yes	%
Cannabis (marijuana, pot, grass, hashish)	0	0
Cocaine (coke, crack)	0	0
Prescription stimulant (Ritalin, Concerta, Adderall, diet pills)	0	0
Methamphetamine (speed, crystal meth, ice)	0	0
Inhalants (nitrous oxide, glue, gas, paint thinner)	0	0
Sedatives or sleeping pills (Valium, Ativan, Xanax, Librium)	1	20
Hallucinogens (LSD, acid, mushrooms, PCP, ecstasy)	0	0
Street opioids (heroin, opium)	0	0
Prescription opioids (fentanyl, oxycodone, Percocet, hydrocodone)	0	0

Table 8 Client self-reported drug use 3 months after treatment with Suboxone (N=5)

Substance	Yes	%
Cannabis (marijuana, pot, grass, hashish)	0	0
Cocaine (coke, crack)	0	0
Prescription stimulant (Ritalin, Concerta, Adderall, diet pills)	0	0
Methamphetamine (speed, crystal meth, ice)	0	0
Inhalants (nitrous oxide, glue, gas, paint thinner)	0	0
Sedatives or sleeping pills (Valium, Ativan, Xanax, Librium)	1	20
Hallucinogens (LSD, acid, mushrooms, PCP, ecstasy)	0	0
Street opioids (heroin, opium)	0	0
Prescription opioids (fentanyl, oxycodone, Percocet, hydrocodone)	0	0

Appendices

THE UNIVERSITY OF
ALABAMA IN HUNTSVILLE

March 5th 2018

☒ Expedited (see pg 2)
☐ Exempted (see pg 3)
☐ Full Review
☐ Extension of Approval

Marina Nedospasova
Department of Nursing
University of Alabama in Huntsville

Dear Ms. Nedospasova,

The UAH Institutional Review Board of Human Subjects Committee has reviewed your proposal, *The feasibility and acceptability of using a Medication Assisted Treatment (MAT) program with Suboxone for patients in a community behavioral clinic,* and found it meets the necessary criteria for approval. Your proposal seems to be in compliance with this institutions Federal Wide Assurance (FWA) 00019998 and the DHHS Regulations for the Protection of Human Subjects (45 CFR 46).

Please note that this approval is good for one year from the date on this letter. If data collection continues past this period, you are responsible for processing a renewal application a minimum of 60 days prior to the expiration date.

No changes are to be made to the approved protocol without prior review and approval from the UAH IRB. All changes (e.g. a change in procedure, number of subjects, personnel, study locations, new recruitment materials, study instruments, etc) must be prospectively reviewed and approved by the IRB before they are implemented. You should report any unanticipated problems involving risks to the participants or others to the IRB Chair.

If you have any questions regarding the IRB's decision, please contact me.

Sincerely,

Bruce Stallsmith

Bruce Stallsmith
IRB Chair
Professor, Biological Sciences

WellStone
Connect to health & well-being

HUNTSVILLE
4040 S. Memorial Parkway
Huntsville, AL 35802
256.533.1970

April 3, 2018

University of Alabama in Huntsville
Institutional Review Board
301 Sparkman Drive
Huntsville, AL 35899

To Whom It May Concern:

I, Jeremy Blair, as the CEO of WellStone located in Huntsville, have reviewed Marina Nedospasova's (CRNP) IRB proposal. Upon review, I support her scholarly project going towards her DNP at UAH and look forward to reviewing the results of the project.

Sincerely,

Jeremy Blair
Chief Executive Officer
WellStone, Inc.

From: Gerald Melnick <g_melnick@yahoo.com>
Date: February 21, 2018 at 7:07:44 PM CST
To: "mvn0003@uah.edu" <mvn0003@uah.edu>
Cc: Georgeaol <geodeleon@aol.com>
Subject: Re: Fwd: Permission to use your CMR Scale

Yes, you have permission to use the CMR in your research on MAT.

Best,
Gerald Melnick, Ph.D.

AANP ACCREDITED | American Association of NURSE PRACTITIONERS™

CONTINUING EDUCATION CERTIFICATE

This is to certify

Marina V. Nedospasova

has successfully completed the education activity

NP/PA 24-Hour Buprenorphine Waiver Training

This activity has been approved for 24.00 AANP CE; 18.00 of which may be applied towards Pharmacology

by the American Association of Nurse Practitioners. Activity ID # 16122474

This activity was planned in accordance with AANP CE Standards and Policies.

Date Completed:
12/25/2017 7:23 AM (GMT-06:00) Central Time (US & Canada)

Activity Sponsor/Provider: AANP

American Association of Nurse Practitioners
P.O. Box 12846
Austin, TX 78711
(512) 4424262

Anne Norman

Anne Norman, DNP, APRN, FNP-C, FAANP
Vice President of Education and Accreditation

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)

COMPLETION REPORT - PART 1 OF 2
COURSEWORK REQUIREMENTS*

* NOTE: Scores on this Requirements Report reflect quiz completions at the time all requirements for the course were met. See list below for details. See separate Transcript Report for more recent quiz scores, including those on optional (supplemental) course elements.

- **Name:** Marina Nedospasova (ID: 7021435)
- **Institution Affiliation:** The University of Alabama in Huntsville (ID: 3340)
- **Institution Email:** mvn0003@uah.edu

- **Curriculum Group:** Human Subjects Researchers
- **Course Learner Group:** Same as Curriculum Group
- **Stage:** Stage 1 - Basic Course

- **Record ID:** 26308534
- **Completion Date:** 28-Feb-2018
- **Expiration Date:** 27-Feb-2021
- **Minimum Passing:** 80
- **Reported Score*:** 81

REQUIRED AND ELECTIVE MODULES ONLY	DATE COMPLETED	SCORE
History and Ethical Principles - SBE (ID: 490)	27-Feb-2018	4/5 (80%)
Defining Research with Human Subjects - SBE (ID: 491)	26-Feb-2018	4/5 (80%)
History and Ethics of Human Subjects Research (ID: 498)	26-Feb-2018	7/7 (100%)
The Federal Regulations - SBE (ID: 502)	26-Feb-2018	5/5 (100%)
Assessing Risk - SBE (ID: 503)	27-Feb-2018	3/5 (60%)
Informed Consent - SBE (ID: 504)	27-Feb-2018	3/5 (60%)
Privacy and Confidentiality - SBE (ID: 505)	27-Feb-2018	5/5 (100%)
Informed Consent (ID: 3)	26-Feb-2018	4/5 (80%)
Populations in Research Requiring Additional Considerations and/or Protections (ID: 16680)	27-Feb-2018	5/5 (100%)
Records-Based Research (ID: 5)	28-Feb-2018	3/3 (100%)
Research Involving Pregnant Women, Fetuses, and Neonates (ID: 10)	28-Feb-2018	2/3 (67%)
Research with Prisoners - SBE (ID: 506)	27-Feb-2018	4/5 (80%)
Research with Children - SBE (ID: 507)	28-Feb-2018	4/5 (80%)
Internet-Based Research - SBE (ID: 510)	28-Feb-2018	2/5 (40%)

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: www.citiprogram.org/verify/?k0267290f-48b6-4cd3-beb0-1a0243d8e401-26308534

Collaborative Institutional Training Initiative (CITI Program)
Email: support@citiprogram.org
Phone: 888-529-5929
Web: https://www.citiprogram.org

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)

COMPLETION REPORT - PART 2 OF 2

COURSEWORK TRANSCRIPT**

** NOTE: Scores on this Transcript Report reflect the most current quiz completions, including quizzes on optional (supplemental) elements of the course. See list below for details. See separate Requirements Report for the reported scores at the time all requirements for the course were met.

- **Name:** Marina Nedospasova (ID: 7021435)
- **Institution Affiliation:** The University of Alabama in Huntsville (ID: 3340)
- **Institution Email:** mvn0003@uah.edu

- **Curriculum Group:** Human Subjects Researchers
- **Course Learner Group:** Same as Curriculum Group
- **Stage:** Stage 1 - Basic Course

- **Record ID:** 26308534
- **Report Date:** 28-Feb-2018
- **Current Score**:** 81

REQUIRED, ELECTIVE, AND SUPPLEMENTAL MODULES	MOST RECENT	SCORE
History and Ethics of Human Subjects Research (ID: 498)	26-Feb-2018	7/7 (100%)
Informed Consent (ID: 3)	26-Feb-2018	4/5 (80%)
History and Ethical Principles - SBE (ID: 490)	27-Feb-2018	4/5 (80%)
Defining Research with Human Subjects - SBE (ID: 491)	26-Feb-2018	4/5 (80%)
Records-Based Research (ID: 5)	28-Feb-2018	3/3 (100%)
The Federal Regulations - SBE (ID: 502)	26-Feb-2018	5/5 (100%)
Assessing Risk - SBE (ID: 503)	27-Feb-2018	3/5 (60%)
Informed Consent - SBE (ID: 504)	27-Feb-2018	3/5 (60%)
Privacy and Confidentiality - SBE (ID: 505)	27-Feb-2018	5/5 (100%)
Research with Prisoners - SBE (ID: 506)	27-Feb-2018	4/5 (80%)
Research Involving Pregnant Women, Fetuses, and Neonates (ID: 10)	28-Feb-2018	2/3 (67%)
Research with Children - SBE (ID: 507)	28-Feb-2018	4/5 (80%)
Internet-Based Research - SBE (ID: 510)	28-Feb-2018	2/5 (40%)
Populations in Research Requiring Additional Considerations and/or Protections (ID: 16680)	27-Feb-2018	5/5 (100%)

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: www.citiprogram.org/verify/?k02672909-48b6-4od3-beb0-1a0243d8e401-26308534

Collaborative Institutional Training Initiative (CITI Program)
Email: support@citiprogram.org
Phone: 888-529-5929
Web: https://www.citiprogram.org

CIRCUMSTANCES, MOTIVATION, and READINESS SCALES for SUBSTANCE ABUSE TREATMENT

CMR FACTOR SCALES
Intake Version

CLIENT ID NUMBER .....(___/___/___/___/___/___/___/___) (1-8)

CLIENT GENDER .....(___) (9)
1=Male 2=Female

CLIENT ETHNICITY .....(___) (10)
1=African American 2=Hispanic 3=White 4=Other

CLIENT AGE .....(___/___) (11-12)

PRIMARY DRUG .....(___/___) (13-14)
1=Non-crack cocaine
2=Crack
3=Opiates
4=Marijuana
5=Alcohol
6=Poly Drug
8=Other

TREATMENT MODALITY .....(___/___) (15-16)
1=Drug Free Outpatient
2=Day Treatment
3=Methadone Maintenance
4=Short Term Residential
5=Long Term Residential
6=No Treatment Entered
7=Detoxification Only
8= Detoxification as Entry into Treatment
9=Hospital Inpatient
10=Referral Center
11=Other

DATE OF ADMINISTRATION .....(___/___/___/___/___/___) (17-22)

FOR CTCR USE ONLY. PLEASE LEAVE BLANK.

INSTRUMENT VERSION.....( ) (23)

PROGRAM NUMBER.....(/) (24-25)

How you feel can have a powerful effect on treatment. These feelings include your circumstances, the problems in your life, your feelings about yourself, and your feelings about treatment. Carefully consider each of the questions below and indicate how closely they describe your own thoughts and feelings.

Circle the number that best describes your response.

1	2	3	4	5	9
Strongly Disagree	**Disagree**	**Neither Agree or Disagree**	**Agree**	**Strongly Agree**	**Not Applicable**

CIRCUMSTANCES

1.	I am sure that I would go to jail if I didn't enter treatment.	1----2----3----4----5----9	___ (26)
2.	I am sure that I would have come to treatment without the pressure of my legal involvement.	1----2----3----4----5----9	___ (27)
3.	I am sure that my family will not let me live at home if I did not come to treatment.	1----2----3----4----5----9	___ (28)
4.	I believe that my family/relationship will try to make me leave treatment after a few months.	1----2----3----4----5----9	___ (29)
5.	I am worried that I will have serious money problems if I stay in treatment.	1----2----3----4----5----9	___ (30)
6.	Basically, I feel I have too many outside problems that will prevent me from completing treatment (parents, spouse/relationship, children, loss of job, loss of income, loss of education, family problems, loss of home/place to live, etc.).	1----2----3----4----5----9	___ (31)

MOTIVATION

7.	Basically, I feel that my drug use is a very serious problem in my life.	1----2----3----4----5----9	___ (32)
8.	Often I don't like myself because of my drug use.	1----2----3----4----5----9	___ (33)
9.	Lately, I feel if I don't change, my life will keep getting worse.	1----2----3----4----5----9	___ (34)
10.	I really feel bad that my drug use and the way I've been living has hurt a lot of people.	1----2----3----4----5----9	___ (35)
11.	It is more important to me than anything else that I stop using drugs.	1----2----3----4----5----9	___ (36)

1 Strongly Disagree	2 Disagree	3 Neither Agree or Disagree	4 Agree	5 Strongly Agree	9 Not Applicable

READINESS

12.	I don't really believe that I have to be in treatment to stop using drugs, I can stop anytime I want.	1----2----3----4----5----9	___ (37)
13.	I came to this program because I really feel that I'm ready to deal with myself in treatment.	1----2----3----4----5----9	___ (38)
14.	I'll do whatever I have to do to get my life straightened out.	1----2----3----4----5----9	___ (39)
15.	Basically, I don't see any other choice for help at this time except some kind of treatment.	1----2----3----4----5----9	___ (40)
16.	I don't really think I can stop my drug use with the help of friends, family or religion, I really need some kind of treatment.	1----2----3----4----5----9	___ (41)
17.	I am really tired of using drugs and want to change, but I know I can't do it on my own.	1----2----3----4----5----9	___ (42)
18.	I'm willing to enter treatment as soon as possible.	1----2----3----4----5----9	___ (43)

Questions 1-8 of the NIDA-Modified ASSIST V2.0

Instructions: Patients may fill in the following form themselves but screening personnel should offer to read the questions aloud in a private setting and complete the form for the patient. To preserve confidentiality, a protective sheet should be placed on top of the questionnaire so it will not be seen by other patients after it is completed but before it is filed in the medical record.

Question 1 of 8, NIDA-Modified ASSIST In your <u>LIFETIME</u>, which of the following substances have you ever used? **Note for Physicians: For prescription medications, please report nonmedical use only.*	Yes	No
a. Cannabis (marijuana, pot, grass, hash, etc.)		
b. Cocaine (coke, crack, etc.)		
c. Prescription stimulants (Ritalin, Concerta, Dexedrine, Adderall, diet pills, etc.)		
d. Methamphetamine (speed, crystal meth, ice, etc.)		
e. Inhalants (nitrous oxide, glue, gas, paint thinner, etc.)		
f. Sedatives or sleeping pills (Valium, Serepax, Ativan, Xanax, Librium, Rohypnol, GHB, etc.)		
g. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, ecstasy, etc.)		
h. Street opioids (heroin, opium, etc.)		
i. Prescription opioids [fentanyl, oxycodone [OxyContin, Percocet], hydrocodone [Vicodin], methadone, buprenorphine, etc.]		
j. Other – specify:		

- Given the patient's response to the Quick Screen, the patient *should <u>not</u> indicate* "NO" for all drugs in Question 1. If they do, remind them that their answers to the Quick Screen indicated they used an illegal or prescription drug for nonmedical reasons within the past year and then repeat Question 1. If the patient indicates that the drug used is not listed, please mark 'Yes' next to 'Other' and continue to Question 2 of the NIDA-Modified ASSIST.
- If the patient says "Yes" to any of the drugs, proceed to Question 2 of the NIDA-Modified ASSIST.

Question 2 of 8, NIDA-Modified ASSIST 2. In the past three months, how often have you used the substances you mentioned (first drug, second drug, etc)?	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
• Cannabis (marijuana, pot, grass, hash, etc.)	0	2	3	4	6
• Cocaine (coke, crack, etc.)	0	2	3	4	6
• Prescription stimulants (Ritalin, Concerta, Dexedrine, Adderall, diet pills, etc.)	0	2	3	4	6
• Methamphetamine (speed, crystal meth, ice, etc.)	0	2	3	4	6
• Inhalants (nitrous oxide, glue, gas, paint thinner, etc.)	0	2	3	4	6
• Sedatives or sleeping pills (Valium, Serepax, Ativan, Librium, Xanax, Rohypnol, GHB, etc.)	0	2	3	4	6
• Hallucinogens (LSD, acid, mushrooms, PCP, Special K, ecstasy, etc.)	0	2	3	4	6
• Street opioids (heroin, opium, etc.)	0	2	3	4	6
• Prescription opioids (fentanyl, oxycodone [OxyContin, Percocet], hydrocodone [Vicodin], methadone, buprenorphine, etc.)	0	2	3	4	6
• Other – Specify:	0	2	3	4	6

- For patients who report "Never" having used any drug in the past 3 months: Go to Questions 6-8.
- For any recent illicit or nonmedical prescription drug use, go to Question 3.

3. In the past 3 months, how often have you had a strong desire or urge to use (first drug, second drug, etc)?	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
a. Cannabis (marijuana, pot, grass, hash, etc.)	0	3	4	5	6
b. Cocaine (coke, crack, etc.)	0	3	4	5	6
c. Prescribed Amphetamine type stimulants (Ritalin, Concerta, Dexedrine, Adderall, diet pills, etc.)	0	3	4	5	6
d. Methamphetamine (speed, crystal meth, ice, etc.)	0	3	4	5	6
e. Inhalants (nitrous oxide, glue, gas, paint thinner, etc.)	0	3	4	5	6
f. Sedatives or sleeping pills (Valium, Serepax, Ativan, Librium, Xanax, Rohypnol, GHB, etc.)	0	3	4	5	6
g. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, ecstasy, etc.)	0	3	4	5	6
h. Street Opioids (heroin, opium, etc.)	0	3	4	5	6
i. Prescribed opioids (fentanyl, oxycodone [OxyContin, Percocet], hydrocodone [Vicodin], methadone, buprenorphine, etc.)	0	3	4	5	6
j. Other – Specify:	0	3	4	5	6

4. During the past 3 months, how often has your use of (first drug, second drug, etc) led to health, social, legal or financial problems?	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
a. Cannabis (marijuana, pot, grass, hash, etc.)	0	4	5	6	7
b. Cocaine (coke, crack, etc.)	0	4	5	6	7
c. Prescribed Amphetamine type stimulants (Ritalin, Concerta, Dexedrine, Adderall, diet pills, etc.)	0	4	5	6	7
d. Methamphetamine (speed, crystal meth, ice, etc.)	0	4	5	6	7
e. Inhalants (nitrous oxide, glue, gas, pain thinner, etc.)	0	4	5	6	7
f. Sedatives or sleeping pills (Valium, Serepax, Ativan, Librium, Xanax, Rohypnol, GHB, etc.)	0	4	5	6	7
g. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, ecstasy, etc.)	0	4	5	6	7
h. Street opioids (heroin, opium, etc.)	0	4	5	6	7
i. Prescribed opioids (fentanyl, oxycodone [OxyContin, Percocet], hydrocodone [Vicodin], methadone, buprenorphine, etc.)	0	4	5	6	7
j. Other – Specify:	0	4	5	6	7

5. During the past 3 months, how often have you failed to do what was normally expected of you because of your use of (first drug, second drug, etc)?	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
a. Cannabis (marijuana, pot, grass, hash, etc.)	0	5	6	7	8
b. Cocaine (coke, crack, etc.)	0	5	6	7	8
c. Prescribed Amphetamine type stimulants (Ritalin, Concerta, Dexedrine, Adderall, diet pills, etc.)	0	5	6	7	8
d. Methamphetamine (speed, crystal meth, ice, etc.)	0	5	6	7	8
e. Inhalants (nitrous oxide, glue, gas, paint thinner, etc.)	0	5	6	7	8
f. Sedatives or sleeping pills (Valium, Serepax, Ativan, Librium, Xanax, Rohypnol, GHB, etc.)	0	5	6	7	8
g. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, ecstasy, etc.)	0	5	6	7	8
h. Street Opioids (heroin, opium, etc.)	0	5	6	7	8
i. Prescribed opioids (fentanyl, oxycodone [OxyContin, Percocet], hydrocodone [Vicodin], methadone, buprenorphine, etc.)	0	5	6	7	8
j. Other – Specify:	0	5	6	7	8

Instructions: Ask Questions 6 & 7 for all substances ever used (i.e., those endorsed in the Question 1).

6. Has a friend or relative or anyone else ever expressed concern about your use of (first drug, second drug, etc)?	No, never	Yes, but not in the past 3 months	Yes, in the past 3 months
a. Cannabis (marijuana, pot, grass, hash, etc.)	0	3	6
b. Cocaine (coke, crack, etc.)	0	3	6
c. Prescribed Amphetamine type stimulants (Ritalin, Concerta, Dexedrine, Adderall, diet pills, etc.)	0	3	6
d. Methamphetamine (speed, crystal meth, ice, etc.)	0	3	6
e. Inhalants (nitrous oxide, glue, gas, paint thinner, etc.)	0	3	6
f. Sedatives or sleeping pills (Valium, Serepax, Xanax, Ativan, Librium, Rohypnol, GHB, etc.)	0	3	6
g. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, ecstasy, etc.)	0	3	6
h. Street opioids (heroin, opium, etc.)	0	3	6
i. Prescribed opioids (fentanyl, oxycodone [OxyContin, Percocet], hydrocodone [Vicodin], methadone, buprenorphine, etc.)	0	3	6
j. Other – Specify:	0	3	6

The Journal of Psychosocial Nursing and Mental Health Services guidelines for authors

Authorship Criteria and Responsibilities

Criteria for authorship include contribution to:

- Conception and design, or
- Data collection, or
- Analysis and interpretation

AND

- Writing the manuscript, or
- Critical revision of the manuscript

All individuals identified as authors should meet the necessary criteria for authorship listed above, and all individuals who meet the criteria should be identified as authors. Those who do not meet the necessary criteria should be acknowledged. Any issues related to authorship must be resolved before the manuscript is submitted to the Journal.

Authors should be accountable for the portions of the manuscript to which they have contributed. They should also have confidence in the integrity of the contributions of all other authors. All authors should have read the final manuscript prior to submission and be aware of its submission to the Journal.

One author must be identified as the corresponding author, who is responsible for (1) ensuring all authors meet the authorship criteria and complete the required Author Statement-ICMJE Form for Disclosure of Potential Conflicts of Interest; (2) submitting the manuscript to the Journal and serving as the main contact during the review process; and (3) performing any related activities if the manuscript is accepted, such as reviewing proofs of the edited manuscript and answering editorial queries. The corresponding author will be identified as the primary contact in the published article.

Order of authorship must be determined and agreed upon by all authors before manuscript submission. Any disagreements should be resolved before submitting the manuscript. Changes in authorship (ie, order, addition, and/or deletion of authors) must be approved by all authors. Requests for changes in authorship after initial manuscript submission and before publication are required in writing (email preferred) signed by all authors.

Acknowledgments

Any individuals who contributed to the manuscript but do not meet the necessary criteria for authorship should be acknowledged. Acknowledgments should be limited to those who helped extensively, such as providing statistical help, essential equipment, or translating references.

Copyright Transfer

Manuscripts are accepted with the understanding that they have not been previously published (in print or online) and are not under simultaneous consideration by another publication. Accepted manuscripts become the permanent property of the Journal and will not be published until the Author Statement-ICMJE Form for Disclosure of Potential Conflicts of Interest has been completed in full by each author.

If a submitted manuscript has been previously posted in an open access repository (e.g., a dissertation or thesis posted in an open access university repository), the submitted manuscript must be unique and have less than 50% overlap with the posted paper.

Conflict of Interest and Sponsorship

If any author has a financial conflict of interest in the subject matter in the manuscript, this must be indicated. If the manuscript discusses in any way a drug, a device, equipment, or an instrument, the authors must state whether or not they have any commercial or proprietary interest in the product or company.

If applicable, authors should describe the role of the study sponsor, if any, in study design; collection, analysis, and interpretation of data; writing the report; and the decision to submit the report for publication. If the supporting source had no such involvement, the authors should so state. If applicable, authors must declare whether they had assistance with study design, data collection, data analysis, or manuscript preparation. If the manuscript reports on a registered clinical trial and has been assigned a trial registration number from a public trials registry, authors should provide this information.

Human Subjects Protection and Protection of Identifiable Subjects

Reports of studies involving human subjects must indicate procedures for the protection of their rights, as well as Institutional Review Board (IRB) approval.

If subjects' personal details are provided, measures should be taken to protect subjects' identity. If photographs are submitted with a manuscript, permission to publish must be obtained in writing from all individuals pictured. Measures to conceal the identity of an

individual in a photograph, such as placing black bars over the person's eyes, should not be used.

Manuscript Preparation

General Guidelines

Manuscripts should be prepared following the *Publication Manual of the American Psychological Association,* sixth edition (2010). Pages must be double-spaced, left justified, and with 1-inch margins on all sides.

Manuscripts should not include a title page or any other author-identifying or institution-identifying information to ensure blind peer review. Authors are asked to use an "X" as a placeholder for identifying information until a final decision has been made.

IMPORTANT! Manuscript files uploaded for review should NOT include any of the authors' names or institutional affiliations to facilitate blind peer review. Files MUST include continuous page and line numbers.

Manuscript titles should be concise, specific, and informative, and contain the key points of the work. Overly general titles, as well as questions and declarative sentences, should be avoided.

Use of abbreviations should be limited to those that are commonly understood without explanation. All abbreviations must be spelled out at first mention in the text. Pharmaceuticals should be referred to by their generic names.

References

References should focus on the most recent and relevant literature, except for classic publications, and keep as close as possible to a maximum of 20.

References must adhere to the style specified in the *Publication Manual of the American Psychological Association,* sixth edition (2010). Authors are responsible for the accuracy of references, particularly author names and page numbers.

Names of journals should conform to PubMed/MEDLINE. The titles of those journals that are not listed in PubMed/MEDLINE must be provided in full. Journal titles should be cited as they existed at the time of publication.

Figures, Photos, and Illustrations

Each figure must be numbered and cited consecutively in the text.

- Permissions: Drawings or computer-generated images submitted with a manuscript require permission to publish from the artist. Authors must disclose whether any figures or tables have been previously published; such materials must be accompanied by a letter of permission from the publisher, which extends non-exclusive worldwide rights to reprint the material for all forms of media now or hereafter developed to SLACK Incorporated. Content from U.S. government websites (eg, NIH, CDC, USDHHS) is in the public domain and generally can be used without permission. However, some content on these sites may be from another source, in which case permission must be obtained from the copyright holder. In case studies involving actual people, their written release is required.
- Legends: The legend should be a brief description that allows the figure to be fully understood. Legends, headings, or captions should not be included within the image files, and instead should be provided in the manuscript files.
- Digital Requirements: Digital images should be high resolution (at least 300 dpi) and saved in JPEG or TIFF format. Image files should be uploaded separately from manuscript text files. Images embedded in Word files and PowerPoint® slides are not acceptable.

Tables

Each table must be numbered and cited consecutively in the text and should have a short descriptive title. Abbreviations used in tables that are not commonly understood terms should be explained in a legend. Material that is in the tables should not be repeated in the text.

Manuscript Types and Requirements

Feature Articles

Feature articles describe new ideas, clinical strategies, research studies, ethical dilemmas, economic changes, and management directions. All manuscripts, including reports of research studies, must include clinical implications.

Feature article manuscripts should be no more than 15 pages in length, excluding references and figures/tables, and must include an unstructured abstract of approximately 150 words.

Sections

The Journal also publishes the following sections:

- **Psychopharmacology** (published monthly) explores psychotherapeutic issues and agents in clinical practice.
- **Aging Matters** (published in January, April, July, and October) addresses issues related to geropsychiatry and the well-being of older adults.
- **Substance Use and Related Disorders** (published in March, June, September, and December) addresses issues related to addictive behaviors and diagnoses.
- **Youth in Mind** (published in February, May, August, and November) addresses psychiatric and psychosocial issues related to children and adolescents.

All manuscripts submitted for a section should be a maximum of 5 pages in length and include an unstructured abstract of approximately 150 words.

Manuscript Submission
Manuscripts should be submitted via Editorial Manager®. Authors should contact the editorial office with questions regarding the submission process.

Review Process
All manuscripts undergo double-blind peer review by the Editorial Board and members of the Review Panel. Final decisions regarding manuscript disposition are made by the Editor, and authors are notified by e-mail as soon as possible about the acceptability of their manuscript.

It is recommended that novice authors have their manuscripts reviewed by their well-published peers, instructors, or mentors prior to submission.

Peer reviewers are required to maintain confidentiality about the manuscripts they review and must not divulge any information about a specific manuscript or its contents without prior permission.

All submissions will be evaluated using the following criteria:

1. The importance and relevance of the topic to psychiatric-mental health nursing care; the generalizability of the ideas/research findings.
2. Readability; concise, logical ordering of ideas.
3. Sound rationale for ideas, including background.
4. Adequate documentation of ideas; citation of recent and relevant literature.
5. Appropriateness of inquiry methods, including design, sample, instruments, and procedures, if research.
6. Accuracy of content; soundness of conclusions.

Supplemental Material or Data

Supplemental material or data submitted with a manuscript will undergo peer review with the main manuscript. If the manuscript is accepted for publication and if the supplemental material is deemed appropriate for publication, the material or data will be posted online only with the article at the time of publication. Supplemental material will not be copyedited or formatted; therefore, the authors are responsible for the accuracy and presentation of the material.

Policy on Research Misconduct

The publisher and editor will take reasonable steps to identify and prevent the publication of papers where research misconduct has occurred, including but not limited to plagiarism, citation manipulation, and data falsification/fabrication. Per journal policy, final manuscript acceptance is contingent upon successfully passing a plagiarism software check. If an allegation of research misconduct is made related to an article published in the Journal, the publisher and editor will follow the guidelines provided by the Committee on Publication Ethics (COPE) to address such allegations.

Open Access Publication Option

The Journal offers an open access publication option to authors of accepted peer-reviewed articles. With this option, articles are made freely available online immediately upon publication in exchange for payment of an article-processing charge of $1500. SLACK Incorporated's Open Access Publication Policy can be found here.

Copyediting and Author Proofs

All accepted manuscripts are professionally copyedited to adhere to the *Publication Manual of the American Psychological Association,* sixth edition (2010), and journal style. The Journal reserves the right to delete extraneous or excess material, and change or add titles and headings. Proofs of the edited article are provided to the corresponding author for review and approval. Rewriting the manuscript or making frivolous changes at the proof stage is unacceptable. Authors are responsible for all statements made in their work, including changes made during copyediting and production that are approved by the corresponding author.

Letters to the Editor

Letters to the Editor are correspondence regarding articles previously published in the *Journal of Psychosocial Nursing and Mental Health Services* or other topics relevant to practicing psychiatric-mental health nurses. If the letter is regarding a previously

published article, it must be submitted within 12 months of the article's publication to be considered for possible publication, and the author of that article will be given the opportunity to respond.

Letters should be no longer than 500 words. References are not necessary, but if included, should be kept to a maximum of 3. All letters must contain a clear message or point for readers. Letters may be edited for clarity or length, and letter authors must disclose any competing or conflicting interests, if applicable. All letters are published at the Editor's discretion. Letters should be submitted by email to the editorial office.

Corrections and Errata

Requests to publish corrections should be emailed to the editorial office. Corrections and errata are reviewed by the Editor, published promptly, and linked online to the original article.

Article Reprints

Article reprints are available through Wright's Media.

Archiving

The publisher works with Portico to ensure electronic backup and preservation of access to *Journal of Psychosocial Nursing and Mental Health Services* content.

Editorial Office

Questions regarding the Journal should be directed to the editorial office.

SLACK Author Services

Authors interested in services that include English language editing, translation into English, and research communication can click here to access SLACK Author Services. Fees apply to services selected, but a 10% discount is valid until September 30, 2018 (use coupon code SLACK10). Use of SLACK Author Services does not guarantee acceptance by any SLACK journal.

Scholarly Uses of Journal Articles

Acceptable uses of SLACK Incorporated journal articles that are not published open access are outlined in the chart below.

SCHOLARLY USES OF NON-OPEN ACCESS JOURNAL ARTICLES

Scholarly Use	Abstract, Link to Article on Healio.com, and Citation	Author's Accepted Version	Final Publisher Version
Author's personal, noncommerical website or blog	Yes	Yes, 12 months following publication	No
Author's promotion/tenure packet	Yes	Yes	Yes
Sharing with colleagues on request for their personal use	Yes	Yes	Yes, up to 25 copies and **NOT** including distribution to large email lists or list servers
Teaching/training at the author's institution	Yes	Yes	Yes, as long as reasonable measures taken not to allow open sharing on the internet
Conferences (oral presentation, display, and/or photocopies)	Yes (if article is still "in press," only the abstract may be used)	Yes (if the article is still "in press," only one table or figure may be used)	Yes, up to 25 copies (contact the editorial office if more copies are needed)
Dissertations, theses, or grant applications	Yes	Yes	Yes, with the exception of open access theses/ dissertations
Institutional repository (private, closed)	Yes	Yes, 12 months following publication	No
Institutional repository (open access)	Yes	No	No
Funding repository	Yes	Yes, 12 months following publication	No
Scholarly collaboration networks (eg, ResearchGate, Academia.edu)	Yes	Yes, 12 months following publication	No
Social media	Yes	No	No
Commercial purposes	Contact the publisher	Contact the publisher	Contact the publisher

Open Access Articles

Articles that are published open access in the Journal may be shared at any time as long as the applicable Creative Commons license is observed and remains in place.

For details and more information about publishing open access, access the Journal's Information for Authors.

Commercial Uses and/or Systematic Distribution

Authors of non-open access articles published in SLACK Incorporated journals may reuse the articles only for the scholarly purposes as set out above but may NOT use or post them for commercial purposes or under policies or other mechanisms designed to aggregate and openly disseminate manuscripts or articles. This includes the use or posting of articles for

commercial gain or to substitute for the services provided directly by the journal, including the posting by companies of their employee-authored works for use by customers of such companies (eg, pharmaceutical companies and physician prescribers); commercial exploitation, such as directly associating advertising with such postings; the charging of fees for document delivery or access; and the systematic distribution to others via email lists or list servers, whether for a fee or for free. Please note that scholarly social networks such as ResearchGate and Academia.edu are commercial entities and that posting the final published version of an article to these sites is considered commercial reuse.

Public Access Policy for Non-Open Access Articles

SLACK Incorporated's journal copyright agreements enable authors funded by the National Institutes of Health (NIH) to deposit their accepted manuscripts to PubMed Central for posting 12 months following publication by SLACK Incorporated. The agreement also allows posting of accepted manuscripts on authors' institutional repositories, with the exception of open access repositories, 12 months following publication by SLACK Incorporated. Authors should include a link to the final published article on the journal website. SLACK Incorporated will retain copyright for these articles, which prohibits republication elsewhere, and SLACK Incorporated will retain the right to charge a fee for the final published versions of these articles in whatever format they appear.

For uses that do not fall within the situations listed above, please visit healio.com/permissions.

Questions? Contact: SLACK Customer Service, 1-800-257-8290 (856-848-1000 in NJ) or customerservice@slackinc.com