# SCHREYER HONORS COLLEGE

# DEPARTMENT OF PSYCHOLOGICAL AND SOCIAL SCIENCES

# ASSESSING STIGMA ASSOCIATED WITH MEDICATION-ASSISTED TREATMENT IN THE RECOVERY COMMUNITY

# ERIN LEAH BERGNER SPRING 2020

A thesis submitted in partial fulfillment of the requirements for a baccalaureate degree in Psychological and Social Sciences with honors in Letters, Arts, and Sciences

Reviewed and approved\* by the following:

Glenn Sterner Assistant Professor of Criminal Justice Thesis Supervisor

David Ruth Associate Professor of History Honors Adviser

Judith Newman Associate Professor of Human Development and Family Studies Faculty Reader

\* Electronic approvals are on file.

# ABSTRACT

Medication-assisted treatment (MAT) is the utilization of medications to treat substance use disorder, specifically opioid use disorder and alcohol use disorder, in conjunction with therapeutic services. MAT is considered the gold-standard of care for opioid use disorder. Despite the evidence associated with the effectiveness of MAT, it remains underutilized. This study aims to further explore the stigma associated with MAT and those who use it by speaking with individuals in the recovery community about their thoughts on MAT. Two questions prompted the research: 1. What are the perceptions of MAT within the recovery community? 2. Where do these perceptions and beliefs stem from? Twenty-one extensive interviews were conducted with members of the recovery community to hear about their thoughts and experiences with MAT. Both positive and negative perceptions were heard. Individual participants did not use MAT as a part of their recovery process, but some individuals did receive medication during their detox process. Stigma associated with MAT stems from personal experiences and ideations specific to the recovery model one follows. A few prominent themes include the ideation that those who use MAT are not truly sober, they're replacing one drug with another. On the contrary, there were a few positive themes that were found across interviews, some of these included the belief that MAT saves lives and that it is another pathway to recovery for individuals to use.

Keywords: MAT, SUD, Stigma

# TABLE OF CONTENTS

LIST OF FIGURES	iv
LIST OF TABLES	V
ACKNOWLEDGEMENTS	vi
Chapter 1 Introduction	1
Chapter 2 Literature Review	6
SUD Diagnostic Criteria	6
Treatment for SUDs	9
Types of MAT	12
Methadone	
Buprenorphine	14
Naltrexone	15
Disulfiram and Acamprosate	16
How MAT Works	17
Length of Treatment	
Effectiveness of MAT to Treat SUDs	19
Cost Effectiveness of MAT	21
Stigma	
Functions of Stigma	
How Stigma is Manifested	
Stigma Associated with SUD	
Language & SUD	27
Conclusion	
Chapter 3	
Research Question and Methods	34
Research Questions	
Study Population	35
Data Collection	
Data Analysis	
Limitations	
Conclusion	
Chapter 4 Results	42
Demographics of Study Population	42
Summary of Perceptions	
Negative Perceptions	
Types of Stigma	

Sources of Stigma Conclusion	58 62
hapter 5	.64
iscussion	.64
Conclusion	67
ppendix A Screening Questions for Potential Participants	. 69
ppendix B Interview Questions for Participants	.70
ppendix C Coding Schema	.71
ppendix D Summary of Demographics	.73
Table 2	73
ppendix E Coding Schema – Sources of Stigma	.75
IBLIOGRAPHY	.76

# LIST OF FIGURES

Figure 1: National Waver Totals compared to Pennsylvania	4
Figure 2: Types of Stigma and Their Functions	23

# LIST OF TABLES

Table 1: Types of Medication and Their Functions	1	8
--	---	---

# ACKNOWLEDGEMENTS

I want to say thank you to each of the individuals who were so willing to participate in this research and who were so open with their thoughts, beliefs, and attitudes. Research would not be able to be completed and new findings would not be able to be discovered if it were not for all of you. Thank you to my partner Ben for his unconditional love and support. Thank you to my honors advisor, Dr. David Ruth, for his eager support for all the rising Schreyer seniors and continued support throughout the writing process. Thank you to my professor, Dr. Judith Newman, for her honesty, assistance, and kindness, and her generosity for acting as a faculty reader during this process.

A special thanks to my thesis supervisor, Dr. Glenn Sterner, for his dedication, guidance, and support. Dr. Sterner has been a consistent advocate for my academic success, and I would not have been able to accomplish this without him.

Special thank you to my co-workers at the Criminal Justice Research Center at Penn State Abington for their assistance:

> Madison Miller Taylor Miller Taylor Ngyuen Dennis Dozier

# Chapter 1

# Introduction

During the year of 2018, an average of 128 people died from an opioid overdose every day (National Institute on Drug Abuse, 2020). In 2017, 70,000 Americans died from drug overdoses (Center for Disease Control, 2019). Of the fatal overdoses during 2017, 68% involved both prescription and illicit opioids (Center for Disease Control, 2019). It is important to note that while opioids may have been the cause of death, a majority of individuals engaging in substance use are engaging with multiple substances. Consuming more than one drug simultaneously or at different times is known as polysubstance use (Connor et al., 2014). Pennsylvania is third in the nation for the highest rates of death due to drug overdoses (Center for Disease Control, 2019). The economic burden placed on the United States was an estimated \$78.5 billion annually (Center for Disease Control, 2020).

With the modern-day opioid crisis at its peak, it is imperative to investigate potential factors that have a significant contribution to the progression of substance use and relapse of substance use disorders to help minimize negative outcomes, including death. A substance use disorder (SUD) is when recurrent drug or alcohol use causes significant clinical impairment (i.e. health complications), and failure to meet responsibilities (i.e. work, school) (SAMHSA, 2019). There are numerous factors contributing to the progression of substance use and substance use disorders among the American population. One factor is the underutilization of medication assisted treatment (MAT) for substance use disorders in the US, in spite of the fact that it remains the most effective way to treat this disease (SAMHSA, 2020). The portion of people

who were admitted to hospitals with an opioid use disorder (OUD) whose treatment plan included MAT fell from 35% to 28% from 2002 until 2010, respectively (SAMHSA, 2020), which is as the opioid epidemic began to get worse. Some of the reasons the Substance Abuse and Mental Health Services Administration (SAMHSA) believes MAT is underutilized are the following:

> "misconceptions about substituting one drug for another, discrimination against MAT patients, lack of training for physicians, and negative opioids toward MAT in communities and among health care professionals" (paras. 8-11).

The prescribing practices that are in place for doctors prescribing MAT are detailed and lengthy. In the United States, there are 115,086 practitioners who are prescribing MAT (SAMHSA, 2020). Over half of those prescribing MAT, only 86,843 applied for the waiver that allows practitioners to treat up to 30 patients (SAMHSA, 2020). An additional 22,279 practitioners can treat up to 100 patients with the specific waiver they applied for (SAMHSA, 2020). Only 5,946 practitioners in the United States can treat up to 275 patients (SAMHSA, 2020). This means only 5.2% of the total practitioners prescribing MAT can treat the maximum number of patients. <sup>1</sup>

In Pennsylvania specifically, there are only 513 practitioners who can prescribe MAT up to 275 patients (SAMHSA, 2020). There are 4,622 practitioners in Pennsylvania who can treat up to 30 patients and 1,460 who can treat up to 100 patients (SAMHSA, 2020). These numbers are similar to the national level in the sense that the majority of practitioners can treat only 30 patients, then 100 patients, and then 275 patients. Overall, there are a total of 6,595 practitioners

<sup>&</sup>lt;sup>1</sup> I came to this number by taking the number of practitioners who can treat the maximum number of patients (5,946) divided by the total number of practitioners prescribing MAT (115,086).

in Pennsylvania who can prescribe MAT, which accounts for only 5.7% of the total amount of practitioners prescribing MAT in the United States.<sup>2</sup>

According to the U.S. Bureau of Labor Statistics (2019), there are a total of 3,473,670 doctors and nurses practicing in the United States. This number includes family and general practitioners, internists/general, psychiatrists, physician assistants, registered nurses, nurse anesthetists, nurse midwives, and nurse practitioners (U.S. Bureau of Labor Statistics, 2019). Since only 115,086 physicians prescribe MAT, this means that only 3.3% of practitioners and providers prescribe MAT in the United States.<sup>3</sup> There is a great need for the implementation of MAT into SUD treatment. Less than 5% of practitioners in the United States prescribe MAT, leaving an extraordinary amount of people with substance use disorder without access to MAT. Below you can find a chart comparing the nation's waiver totals, number of practitioners able to prescribe MAT, types of practitioners, and level of treatment they can provide, to Pennsylvanians.

One of the factors that could be contributing to the under-utilization of MAT is stigma. Stigma occurs when "elements of labeling, stereotyping, separation, status loss, and discrimination occur together in a power situation that allows them" (Link & Phelan, 2001, p. 337). Prior to conducting this research, a few ideas were thought of as to why MAT was not used as much as it should be. Some of these reasonings included, the stigma associated with MAT and those who use it could be a reason perhaps physicians do not want to prescribe it more or treat those who use MAT. Not only is stigma far-reaching in the healthcare profession, but MAT

 $<sup>^{2}</sup>$  I came to this percentage by taking the number of practitioners here in Pennsylvania (6,595) who prescribe MAT divided by the total amount of providers who can prescribe MAT (115,086).

<sup>&</sup>lt;sup>3</sup> I came to this number by taking the number of practitioners prescribing MAT (115,086) and dividing it by the total number of practitioners in the United States (3,473,670).

could also not be utilized because those with substance use disorder are afraid of facing the stigmatization associated with it. The literature review in chapter two will explore this topic in greater detail.

NATIONAL W	AIVER TOTA	LS						
Up to 30 Patients	<mark>86,843</mark>	67,513 MD/	'DO 15,310	APRN/NP	3,959 PA	23 CNS	5 CRNA	33 (
Up to 100 Patients	<mark>22,279</mark>	17,393 MD/	'DO 3,879 A	APRN/NP	994 PA	4 CNS	1 CRNA	8 CI
Up to 275 Patients	<mark>5,964</mark>	5,408 MD/D	00 426 AP	RN/NP	130 PA			
Totals	<mark>115,086</mark>	90,314 MD/	/DO 19,615	APRN/NP	5,083 PA	27 CNS	6 CNRA	41 C
State Practitioner Count Pennsylvania								
Up to 30 Patients	<b>4,622</b> 3,776	5 MD/DO	582 APRN/NP	264 PA	0 CNS	0 CRNA	0 CNM	
Up to 100 Patients	<b>1,460</b> 1210	MD/DO	165 APRN/NP	85 PA	0 CNS	0 CRNA	0 CNM	
Up to 275 Patients	<b>513</b> 460 N	1D/DO	33 APRN/NP	20 PA				
Totals	<mark>6,595 5,4</mark> 4	6 MD/DO	780 APRN/NP	369 PA	0 CNS	0 CRNA	0 CNM	

#### Figure 1: National Waver Totals compared to Pennsylvania

In the following chapter, I review the relevant literature on substance use disorder, medication assisted treatment, and stigma to explore a theoretical framework that helps to understand the factors that may be affecting MAT utilization and which guides the research in this study. In chapter three, the research questions will be further explained, and the methodology will be outlined that served as the basis of this research; coding schemas, screening questions, and interview questions will be included in the Appendices. In chapter four, the reader can expect the findings associated from the research, both quantitative and qualitative. Direct

Source: Substance Abuse and Mental Health Services Administration (SAMHSA). (2020). Practitioner and program data. Retrieved from <u>https://www.samhsa.gov/medication-assisted-treatment/practitioner-program-data/certified-practitioners</u>

excerpts from the interviews were shared for elaboration. In the final chapter, the discussion associated with the findings and moving forward will serve as a call-to-action as a means to take the findings and explore further research possibilities to better understand the complex issue of stigma.

#### Chapter 2

#### **Literature Review**

This chapter explores the topics of substance use disorder and medication-assisted treatment. Two specific types of SUD, alcohol and opioid use disorder, are highlighted according to diagnosis criteria and treatment pathways. MAT (MAT) will be the primary treatment pathway discussed. The types of MAT, length of treatment, and the implementation of strategy provide the context to understand the intersection of SUD and MAT. While this is the most effective treatment for SUD (SAMHSA, 2020), it remains a highly controversial and stigmatized mode of recovery for patients. The primary focus of this chapter aims to discuss stigma and its manifestations, both with SUD and MAT, and the consequences of the stigma associated with MAT as a pathway of recovery. This discussion finishes with the harmful results stigma brings to MAT and provides the foundation for inquiry into the dimensions of this social phenomena within the SUD recovery community.

#### **SUD Diagnostic Criteria**

SAMHSA (2019) states that a substance use disorder (SUD) is diagnosed when the alcohol or drug use results in a clinically significant state of distress and impairment, "including health problems, disability, and failure to meet major responsibilities at work, school, or home" (paras. 1-4). While there are many types of SUD, this research focuses on two: opioid use disorder (OUD) and alcohol use disorder (AUD). An Opioid Use Disorder, defined by the DSM-V (2013), is

- Opioids are often taken in larger amounts or over a longer period than was intended.
- 2. There is a persistent desire or unsuccessful efforts to cut down or control opioid use.
- 3. A great deal of time is spent in activities necessary to obtain the opioid, use the opioid, or recover from its effects.
- 4. Craving, or a strong desire or urge to use opioids.
- 5. Recurrent opioid use resulting in a failure to fulfill major role obligations at work, school, or home.
- Continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of opioids.
- Important social, occupational, or recreational activities are given up or reduced because of opioid use.
- 8. Recurrent opioid use in situations in which it is physically hazardous.
- Continued opioid use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance.
- 10. Tolerance, as defined by either of the following:
  - a. A need for markedly increased amounts of opioids to achieve intoxication or desired effect.

b. A markedly diminished effect with continued use of the same amount of an opioid.

**Note:** This criterion is not considered to be met for those taking opioids solely under appropriate medical supervision.

11. Withdrawal, as manifested by either of the following:

- a. The characteristic opioid withdrawal syndrome.
- b. Opioids (or a closely related substance) are taken to relieve or avoid withdrawal symptoms.

**Note:** This criterion is not considered to be met for those taking opioids solely under appropriate medical supervision."

According the DSM-V, an Alcohol Use Disorder is

"a problematic pattern of alcohol use leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12month period:

- 1. Alcohol is often taken in larger amounts or over a longer period than was intended.
- 2. There is a persistent desire or unsuccessful efforts to cut down or control alcohol use.
- 3. A great deal of time is spent in activities necessary to obtain the alcohol, use the alcohol, or recover from its effects.
- 4. Craving, or a strong desire or urge to use alcohol.
- 5. Recurrent alcohol use resulting in a failure to fulfill major role obligations at work, school, or home.

- 6. Continued alcohol use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of alcohol.
- Important social, occupational, or recreational activities are given up or reduced because of alcohol use.
- 8. Recurrent alcohol use in situations in which it is physically hazardous.
- Continued alcohol use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance.
- 10. Tolerance, as defined by either of the following:
  - a. A need for markedly increased amounts of alcohol to achieve intoxication or desired effect.
  - b. A markedly diminished effect with continued use of the same amount of alcohol.
- 11. Withdrawal, as manifested by either of the following:
  - a. The characteristic alcohol withdrawal syndrome
  - Alcohol (or a closely related substance) are taken to relieve or avoid withdrawal symptoms" (DSM-5, 2013).

#### **Treatment for SUDs**

There are several treatment options for OUD and AUD. The beginning stage of treatment is not as focused on the disorder as what comes after, but first the individual with the disorder needs to be medically detoxed to remove the drugs from the system to prevent withdrawal (NIDA, 2016). The detoxification process lasts anywhere between five to seven days. Attempting to quit substances cold turkey can be fatal (Diaper et al., 2014), especially for those who use alcohol, opioids, or benzodiazepines. The detoxification process can take place at an inpatient facility or under the supervision of an outpatient medical practitioners' office (ShatterProof, 2020). An inpatient facility program can be anywhere from a 28 day stay, to a 90 stay, to 365 days – it depends on the program and the insurance the patient holds (American Addiction Center, 2019). After an individual is discharged from the inpatient facility, he or she will continue with outpatient treatment, commonly referred to as intensive outpatient (IOP). IOP usually consists of group and individual therapy and is about 10-12 hours per week 3 to 4 days per week (American Addiction Centers, 2020). If an individual chooses not to seek inpatient treatment, he or she could utilize the partial hospitalization program. This means the person in treatment spends their entire day at the facility but goes home at night to sleep (American Addiction Centers, 2019). After either treatment pathway, there are options for after-care. Recovery houses are privately funded housing options for those who need a place to live to maintain sobriety (Livengrin Foundation, 2020). An individual would pay rent and must abide by house rules like maintaining a job and abstinence from substances. There are also half-way houses, which are state funded housing options for those with similar intentions as the people seeking out recovery houses (Livengrin Foundation, 2020).

While there are many treatment options at the systemic/societal level, there are also individual after care options. People who have a SUD have a higher susceptibility of mental illness, so individual therapy is encouraged after someone leaves treatment to continue to work on their substance use and co-occurring struggles. There are many group therapy options for individuals with a SUD. The most common group is Alcoholics Anonymous and Narcotic Anonymous, or otherwise known as the Fellowship (Narcotics Anonymous, 2016). The Fellowship is a nation-wide group consisting of people in recovery from SUD who meet daily to discuss their struggles and triumphs surrounding their substance use and encourage each other to live a life of sobriety (Narcotics Anonymous, 2016).

Aside from in-person therapy, medication can also be utilized for treating SUD. The medications used for maintenance therapy are often used during the detoxification process to cope with withdrawal symptoms (SAMHSA, 2020). The medications used for treatment of SUD consist of some of the following: Buprenorphine, naltrexone, methadone, disulfiram, and acamprosate (SAMHSA, 2020). These medications have different effects than those used for detox and are different chemically compounded. This method of treatment is more commonly referred to as medication-assisted therapy.

# MAT

MAT, commonly referred to as MAT, is the "use of FDA-approved medications, in combination with counseling and behavioral therapies" to treat SUD (SAMHSA, 2019, paras. 1-4). The benefits of MAT consist of the following: "reducing or eliminating withdrawal symptoms, blunting or blocking the effects of illicit opioids, and reducing or eliminating cravings to use opioids" (SAMHSA, 2018, p. 1-3, para. 5).

MAT works to provide a whole patient approach in addressing a person in conjunction with their SUD. A whole patient approach refers to the paradigm where a person's medical professionals work together to make sure the entirety of the patient is being treated (American Psychological Association, 2019). For an example of the whole patient approach, if a person sees a psychologist for depression, that psychologist will connect with the person's psychiatrist (if any) to discuss medication adjustments, and the psychiatrist may connect with the person's primary care physician to discuss things like diet, exercise, and overall health to ensure that the person's health is being addressed. MAT requires communication and coordination among counseling and psychological services and physicians who prescribe medication for SUD (SAMHSA, 2018). MAT works to "normalize brain chemistry, block the euphoric effects of alcohol and opioids, relieve physiological cravings, and normalize bodily functions" (SAMHSA, 2020, paras. 1-3).

#### **Types of MAT**

There are three types of MAT typically used to treat OUD: methadone, buprenorphine, and naltrexone. Methadone is used to treat people who are addicted to heroin and narcotic pain medication (SAMHSA, 2019). Methadone is an agonist opioid, meaning it activates the opioid receptors within the brain and imitates the effects of opioids (Majer et al., 2018). Buprenorphine is both a partial agonist <sup>4</sup>and an antagonist<sup>5</sup>. It activates the opioid receptors in the brain, not as significantly as an agonist, but also blocks the euphoric effects of other opioids (Majer et al., 2018). Naltrexone is an example of an antagonist. Naltrexone blocks the effects of opioids. (SAMHSA, 2020). Therefore, if a person relapses while receiving naltrexone treatment, the effects of the opioid will be blocked, and he or she will not experience any euphoric effects (SAMHSA, 2019). Both methadone and buprenorphine have potential for abuse and dependency; naltrexone, however, does not. Both buprenorphine and naltrexone can be ordered as a prescription through the prescribing physician.

<sup>&</sup>lt;sup>4</sup> An opioid agonist activates opioid receptors, preventing withdrawal symptoms and reducing cravings associated with drug use (NIDA, 2018).

<sup>&</sup>lt;sup>5</sup> An opioid antagonist medication blocks one or more of the opioid receptors in the brain, which prevents euphoria associated with drug use (Theriot & Azadfard, 2019).

#### Methadone

Patients can take methadone as a liquid, a pill, or a wafer (SAMHSA, 2019). Individuals who receive methadone treatment must do so under physician supervision. Typically, an individual receiving methadone visits a methadone clinic daily to receive his or her dose (SAMHSA, 2019). Methadone has more positive outcomes the higher the dosage (SAMHSA, 2018).

Depending on the course of a patient's methadone maintenance treatment, his or her clinician will prescribe take-home doses. A take-home dose is a dose(s) of methadone that a patient can take home and would not have to attend the clinic for a certain amount of days (Newman, 2012). As of 2015, federal guidelines for take-home doses have varied depending on length of treatment and treatment values (negative drug-screening results, taking medication as prescribed, taking your medication, etc.). Patients who are in treatment for at least two years can take a month supply and those who are in treatment for at least one year can take a two-week supply of methadone home (Department of Health and Human Services, 2001). Patients who are in treatment for 90 days can take home two doses per week and anything less than 90 days patients must get their methadone dose daily at the clinic (Department of Health and Human Services, 2001).

SAMHSA states that methadone can be addictive and should be taken as prescribed (2019). Methadone is considered a Schedule II narcotic, which is in the same class as cocaine and methamphetamine (National Drug Intelligence Center, 2006), while the World Health Organization deems Methadone as an essential medication for treating opioid use disorder (Herget, 2005; SAMHSA, 2018, p. 1-12).

#### **Buprenorphine**

Buprenorphine can be taken as a pill or a sublingual film that is placed under the tongue (SAMHSA, 2019). Buprenorphine common brands are the following: Suboxone, Subutex, and Sublocade. Suboxone is comprised of both buprenorphine and naltrexone and Subutex is strictly buprenorphine (American Addiction Centers, 2019). Buprenorphine is prescribed out of a physician's office and is a take home medication, unlike methadone. Sublocade is the newest form of buprenorphine and is a monthly injection administered by a physician. Sublocade releases buprenorphine steadily into the blood stream and lasts for about 30 days (Cidambi, 2017). This is like the naltrexone monthly injection.

Buprenorphine is an opioid antagonist; it binds with opioid receptors in the brain, which means it mitigates the effects of opioids, but to a lesser extent with a full agonist like Heroin (NAMI, 2016, para. 6). Some of the euphoric effects someone who utilizes buprenorphine could experience include sedation and respiratory depression (Yokell et al., 2011). If taken and prescribed properly, euphoric effects are not common; however, if an individual does experience euphoric effects, they'll dissipate as the body adjusts (NAMI, 2016, para. 7). The plateau of euphoric effects is known as the ceiling effect and applies to even high doses of Suboxone (Yokell et al., 2011). Naloxone paired with buprenorphine discourages IV drug users from being able to inject the drug (NAMI, 2016, para. 8). If injected, the individual will experience uncomfortable withdrawal symptoms (NAMI, 2016, para. 8). While buprenorphine is FDA approved and legal it is a Schedule III substance, a step down from methadone which is a Schedule II (DEA, 2019) because of the potential for abuse. The FDA acknowledges the benefits associated with buprenorphine and approved it in 2002. The benefits associated with buprenorphine treatment consist of:

"help individual to remain safe and comfortable during detox, reduce or eliminate cravings for heroin or other opiates, minimize relapse since the individual is not experiencing uncomfortable withdrawal symptoms, and allow the individual to focus on therapy without being distracted by withdrawal symptoms and cravings" (American Addiction Centers, 2019, para. 3).

In 2012, buprenorphine generated \$1.55 billion in the United States (New York Times, 2013). Buprenorphine can be abused and is considered a "substance" within the SUD community, perhaps because of stigma. The form of buprenorphine known as Suboxone has a street value and is a common misused drug among those with an opioid use disorder (New York Times, 2013). The nature of buprenorphine being an antagonist/partially an opioid causes individual to develop some dependence on the drug and experience withdrawal symptoms once the maintenance is stopped. Typically, individuals who are utilizing buprenorphine and wish to stop are tapered off. Tapering off a medication refers to reducing the daily dose or dose of medication periodically until usage is completely stopped; this is to avoid withdrawal symptoms (Kral, 2006).

# Naltrexone

Unlike buprenorphine and methadone, naltrexone is not a Scheduled substance. Naltrexone can be taken as a pill form (daily) or an injection (monthly) (SAMHSA, 2019). Naltrexone can be used to treat both opioid use disorder and alcohol use disorder. Naltrexone works by decreasing the cravings and urges associated with alcohol use disorder and helps to prolong abstinence (NAMI, 2018). If one decides to receive the monthly injection of naltrexone, the prescribing physician administers the injection (SAMHSA, 2019). Potential patients must abstain from opioids and opiates at least 7 days before being able to receive the injection (FDA, 2013). Patients who are interested in receiving the monthly injection often find themselves having to quit cold turkey. Cold turkey is when a person stops taking a drug(s) on his or her own without medical help or supervision (American Addiction Centers, 2019). Cold turkey is often done on one's own terms and is against medical advice, as it can result in death or severe dehydration (American Addiction Centers, 2019). Those with a SUD who stop using drugs cold turkey are more likely to relapse due to the unbearable withdrawal symptoms (American Addiction Centers, 2019); therefore, the idea of having to abstain from opioids or opiates for seven days prior to their first injection is a barrier most face. If an individual relapses, or takes an opioid while receiving naltrexone, he or she has a greater chance of experiencing an overdose (FDA, 2013).

#### **Disulfiram and Acamprosate**

Two other medications known as disulfiram and acamprosate can also be used to treat alcohol use disorder. Disulfiram is commonly known as Antabuse, while acamprosate is known as Campral. Antabuse works by blocking an enzyme associated with the metabolization of alcohol, therefore producing negative side effects when any amount of alcohol is ingested (National Institute of Alcohol Abuse and Alcoholism, 2017). The ideology behind this medication is that if interactions with alcohol are unpleasant, the urge to drink will decrease. Unlike Antabuse, Campral does not have a direct impact on the effects of alcohol consumption, but rather works to restore the brain chemicals that are affected by consistent alcohol ingestion, thereby reducing the brain's dependence on alcohol (Addiction Center, 2019).

#### **How MAT Works**

Through MAT for both OUD and AUD, the medication works to restore natural neurotransmitters associated with urges and cravings so that the brain neuroplasticity can take place (Addiction Center, 2019). Neuroplasticity is the "ability of the nervous system to change its activity in response to intrinsic or extrinsic stimuli by reorganizing its structure, functions, or connections" (Mateos-Aparicio & Rodríguez-Moreno, 2019, p. 1). When addressing neuroplasticity and substance use, neuroplasticity can best be described as the automatic-compulsive drug seeking behavior, meaning the brain is re-wired to seek out drugs because of the associated euphoric effects (O'Brien, 2009). The reward system is constantly activated whenever a substance is ingested (O'Brien, 2009). The brain then makes the association between drug use and good feelings. This perpetuates one's SUD because when a craving begins to present itself, the brain automatically travels down the path of drug use because it is associated with euphoric, good feelings. The objective associated with MAT is to give individuals in early recovery time for their brain to develop physiological pathways like those that existed before substance use.

Type of Medication	Classification	Diagnosis	Function
Methadone	Agonist	Opioid Use Disorder	Minimize withdrawal
			symptoms
			Decrease cravings
Buprenorphine	Partial agonist -	Opioid Use Disorder	Minimize withdrawal
	antagonist		symptoms
			Decrease cravings
Naltrexone	Antagonist	Opioid Use Disorder	Prevents euphoria associated
		Alcohol Use Disorder	with drug use
Disulfiram	Antagonist	Alcohol Use Disorder	Induces unpleasant physical
			symptoms if alcohol is used
Acamprosate	Antagonist	Alcohol Use Disorder	Decreases cravings

**Table 1:** Types of Medication and Their Functions

# Length of Treatment

Length of treatment is dependent on the severity of one's disorder, length of drug use, drug of choice, and one's personal goals. MAT is commonly referred to as maintenance therapy; to maintain sobriety and abstinence (SAMHSA, 2020). Both sobriety and abstinence are intended outcomes for SUD. Sobriety refers to abstinence only; no drug or alcohol use (Laudet, 2007). Sobriety is typically a life-long process, so individuals could use MAT for the maintenance of their sobriety for the rest of their life or for the next 5 years (SAMHSA, 2020). An individual may choose to be on MAT short term or long term. Individuals could choose to use it for the transitional<sup>6</sup> period from active use to abstinence, or they may use it as a basis of their recovery for the rest of their life (NIDA, 2016).

#### **Effectiveness of MAT to Treat SUDs**

Due to the underutilization of MAT, an estimated 1 million people with OUD are left untreated with MAT (Wakeman et al., 2020, p. 2). As of 2017, MAT for AUD was prescribed to less than 9% of people with alcohol use disorder relevant to the study (National Institute of Alcohol Abuse and Alcoholism, 2017). Opioid use disorder (OUD) was responsible for 47,600 overdose deaths in 2017 alone (Wakeman et al., 2020, p. 2). A few out of the outcomes associated with MAT are the following:

> "improve patient survival, increase retention in treatment, decrease illicit opiate use and other criminal activity among people with SUD, increase patients' ability to gain and maintain employment, and improve birth outcomes among women who have SUDs and are pregnant" (SAMHSA, 2019, paras. 9-12).

Further, Wakeman et al. (2020) found that individuals who were receiving MAT, specifically methadone or buprenorphine, were less likely to experience an overdose than those who were not receiving treatment. Wakeman et al. (2020) also found that individuals who used MAT for a shorter period of time (1 to 30 days, or 31 to 180 days) had a greater chance of overdose than those who used MAT for an extended period of time (180 days or more). Additional findings associated with MAT indicate that MAT lowers the rate in which injection

<sup>&</sup>lt;sup>6</sup> The transitional period is a time in which an individual enters a detox program where MAT is prescribed to help lessen the severity of the withdrawal symptoms from the physical dependence and addiction to the substance (NIDA, 2016).

drug users will contract the Hepatitis C virus (HCV) (NIDA, 2014). Tsui et al. (2014) followed young adults who were actively injecting drugs, all of whom were HCV negative, and found that those who were using maintenance therapy (MAT) had "more than 60 percent lower incidence of HCV infection than those not receiving treatment (NIDA, 2014, para. 1). Not only does MAT help to reduce HCV contraction, even more importantly it can help to reduce the rate of overdose deaths among people who have a SUD.

SAMHSA (2018) states that as a result of numerous clinical trials and meta-analyses conducted in various countries, Methadone "retains patients in treatment and reduces illicit opioid use more effectively than placebo, medically supervised withdrawal, or no treatment" (p. 1-4, para. 5). Methadone has also been shown to reduce the risk of criminal behavior, and lower the rates of cellulitis and HIV risk behavior (SAMHSA, 2018, p. 1-5, para. 6).

Researchers in New England conducted a randomized-trial where participants were split into two groups: those who began the Vivitrol injection (Naltrexone) and those who stuck to abstinence, to differentiate the outcomes associated with abstinence only and MAT (Lee et al., 2016, p. 1). The participants of this study were people who have been involved in the criminal justice system. This is an important population because those who are being released from criminal justice facilities are the most at-risk population for over-dose related deaths (Merrall et al., 2010). Some of the key findings from Lee et al. (2016) speak volumes to the impact MAT, Naltrexone in this case, has on an individual's recovery engagement process. Individuals who were receiving Naltrexone therapy had a 43% lower rate of returning to use than those who were not receiving medication who had a 64% relapse rate (Lee et al., 2016). Those who used Naltrexone as a part of their treatment and relapsed, took a longer time to return to use, at 10.5 weeks; whereas, those who did not use medication returned to use at five weeks (Lee et al., 2016). During the 24-week research/treatment process, the 6-month, and 12-month checkup after treatment, there were no relapses reported within the naltrexone group, but seven occurred in the non-medication group (Lee et al., 2016, p. 1241).

#### **Cost Effectiveness of MAT**

In 1994, the Department of Alcohol and Drug Programs in California conducted a largescale study and published results on the effectiveness of substance abuse treatment, as well as other benefits associated with treatment. There were significant findings on the cost of treatment that fell on society. An average of \$7 was returned for every \$1 invested for treatment from taxpayers (Gerstein et al., 1994). Despite the type of treatment accessed, economic savings trumped the costs by at least four to one (Gerstein et al., 1994). Methadone and Buprenorphine are more cost effective than treating an opioid use disorder without medication (SAMHSA, 2018). Counseling, along with Buprenorphine, also led to lower healthcare costs (SAMHSA, 2018). Baser et al. (2011) found that any medication to treat opioid use disorder was associated with fewer inpatient admissions. Total healthcare costs (inpatient, outpatient, and pharmacy costs) were 29% lower for patients who received a medication vs. those who were not treated with a medication (Baser et al., 2011).

#### Stigma

While MAT is widely understood to be the most effective treatment for SUDs, it remains underutilized due to the stigmatizing perspectives associated with its use. Stigma is when "elements of labeling, stereotyping, separation, status loss, and discrimination occur together in a power situation that allows them" (Link & Phelan, 2001, p. 337). To be stigmatized is the act of being held in contempt or shunned socially because of a socially collective disapproval (Corrigan et al., 2008). There are three distinct types of stigma: social, self, and structural (Crapanzano et al., 2019). These three types of stigma are interconnected with regards to their operationalization. According to Crapanzano et. al (2019), social stigma can best be described as "a societal process in which individuals within a society collectively apply stereotypes to an identifiable group" (p. 1). Livingston et al. (2011) describes self-stigma as "[a] subjective process that is 'characterized by negative feelings (about self), maladaptive behavior, identity transformation or stereotype endorsement resulting from an individual's experiences, perceptions, or anticipation of negative social reactions' on the basis of stigmatized social or health condition" (p. 29). Structural stigma, or otherwise known as systemic stigma, can be referred to as "the rules, policies, and procedures of institutions that restrict the rights and opportunities for members of stigmatized groups" (Livingston et al., 2011, pp. 39-40). Structural stigma can influence social stigma, which can then impact levels of self-stigma. For example, drug-related offenses make up a large portion of our prison population; therefore, drug use is seen as a criminal activity, which reflects upon those who use substances. Society then views those who use drugs and people with SUD as criminals. People who use substances may begin to internalize this stigma, and start to think of themselves negatively, producing feelings of guilt and shame. Below are the various forms of stigma, beginning with systemic stigma (policy, regulations), then social (societal norms, inclusion, exclusion), and self-stigma (self-esteem, self-perception). Each stigma has a manifestation or purpose; this can be found next to the appropriate form of stigma.



Figure 2: Types of Stigma and Their Functions

# **Functions of Stigma**

There are three functions of stigma: 1. keep people down, 2. keep people away, and 3. keep people in (Phelan, Link, & Dovidio, 2008). Keeping people down is the ideation of down placing a person(s), making them feel lesser than, even as severe as an individual(s) thinking lesser of themselves (Phelan, Link, & Dovidio, 2008). An example of the type of stigma that "keeps people down" would be the idea of sexism – putting a specific group of people down, i.e. denying women equal pay, so that another group of people may remain more powerful, i.e. men. Being kept away is the idea of socially rejecting a person(s) or producing awkward interactions in hopes of the targeted person(s) feeling isolated from the group (Phelan, Link, & Dovidio, 2008). Furthermore, an example of stigma that "keeps people away" would be a population that is exposed to a widely spread virus, such as the flu, and as a society, we ostracize those who have

it. Stigma associated with "keeping people in", is the ideation that we analyze all situations and people with regulations, and we see people within or outside of those lines (Phelan, Link, & Dovidio, 2008). Stigma enters the equation when individuals do not meet those criteria. An example of the final function of stigma, "keeping people in", would be along the lines of placing a stigma on the people who step out of the social norm, for example, the LGBTQ+ community, in efforts to keep them in line with the general population.

#### How Stigma is Manifested

Stigma manifests itself in three ways: 1) internalized stigma, 2) enacted stigma, and 3) anticipated stigma (Earnshaw, 2019). Internalized stigma is the act of endorsing the negative beliefs and applying to the self (Earnshaw, 2019). A person with a SUD repeatedly being told that their substance use is a reflection on their bad character may begin to believe they are a bad person. Enacted stigma is when an individual or individuals is experiencing or experienced the stigma itself (Earnshaw, 2019). Someone with a SUD who loses their job because they have failed his or her drug test would be an example of enacted stigma. The third manifestation of stigma, anticipated stigma, is the fear of repercussions or expectations in the future because of the stigma they are labeled with (Earnshaw, 2019). An example of anticipated stigma would be if someone was asked to speak publicly about their experience with substance abuse but said no in fear of their job status being affected.

#### Stigma Associated with SUD

Individuals who have SUD have a greater chance of experiencing stigma compared to individuals with any other type of mental illness (Corrigan et al., 2009; Crisp et al., 2000; Cunningham et al., 1993, & Room, 2005). People with a SUD can experience social rejection, labeling, stereotyping, and discrimination, despite receiving no negative consequences for their drug use (Drug Policy Alliance, 2014). This stigma can exercise itself as institutional or structural stigma by denying employment or housing because of an individual's substance use (Drug Policy Alliance, 2014). Individuals who are active in their SUD may experience more public stigma than individuals who are in recovery (Rao, Mahadevappa, Pillay, Sessay, Abraham, & Lutty, 2009). This stigma can prevent individuals from seeking the help they need, causing them to remain active in their SUD (Drug Policy Alliance, 2014).

Not only can stigma associated with substance use prevent individuals from seeking help, but they are less likely to be offered help than individuals with any other mental illness (Corrigan, Kuwabara, & O'Shaughnessy, 2009). In a study of the medical community, Abed & Neira-Munoz (1990) found approximately 65% of general practitioners in their sample believe that drug addicts are "deceitful, unreliable, and unwilling to cooperate with treatment" (Abed & Neira-Munoz, 1990, para 12). A majority of the general practitioners (85%) believed that addiction is not a medical disease, but instead 55% of general practitioners believed drug addiction is morally wrong, sinful, and ignorant, (Abed & Neira-Munoz 1990). Soverow et al. (1972), Beauvais et al. (1991), & Gorman & Morris (1991) believe health professionals hinder the process of treatment by failing to meet the needs of clients with a SUD and ignoring his or her strengths. This makes change or success for the client impossible (Miller, 1983). Results from Witte, Wright, & Stinson (2019) indicate the general US population believes those with SUD are typically to blame for their diagnosis because they "chose" to use drugs and "chose" the lifestyle, and therefore should be held accountable. Not only do people see SUD as a choice, people also associate SUD with being caused by internal factors, such as character, strength, and willpower, rather than external instances (Witte, Wright, Stinson, 2019. In other words, people attribute SUD to moral failure.

People often do not understand why someone active in their SUD would repeatedly receive negative consequences yet not change their behaviors. This judgment may be attributed to a lack of education surrounding SUD (Livingston, 2011). Similarly, when an individual is asked to seek treatment for their SUD and they decline, people see this as an accountability issue and think the individual is causing his or her problem and wants his or her problem (Prochaska & DiClemente, 1982). Rudski (2016) found that the idea of believing in a "just world" (individuals should get what they deserve) correlated with low support for naloxone use and expansion for when an individual overdoses. Naloxone is an FDA approved medication that can prevent or reverse an opioid overdose by blocking opioid receptors (SAMHSA, 2019). Perhaps this could better explain why the implementation for Narcan (naloxone) has been prohibited. Some states have failed to set aside funds to provide for the distribution of Narcan to community members (Drug Policy Alliance, 2019). Some states only have access to Narcan at few intervention points, and some states have even failed to provide Narcan to those leaving prison where the risk of overdose is much higher than the general population (Drug Policy Alliance, 2019). Individuals' beliefs towards people with SUD, such as lacking accountability for their disease, being in denial about their problem, and not seeking help has a significant impact on individuals' beliefs towards SUD.

#### Language & SUD

The power of language has only recently begun to be discussed as the present-day opioid crisis has come to the surface. As part of de-stigmatizing efforts, treatment professionals and advocates have begun to examine the effect of language on those who have SUD. As of 2013, the DSM-V no longer uses the terms substance abuse and substance dependence, but rather the term SUD. A study conducted by Kelly et al. (2010) examined whether someone who was referred to as substance abuser versus a person with a SUD "evokes different judgments about treatment need, punishment, social threat, problem etiology, and self-regulation". The study found that individuals were more likely to see a person in need of help when they were addressed as having "SUD," rather "substance abuser" (Kelly, Dow, Westerhoff, 2010, p. 814). Researchers also found that participants who were referred to as having "substance abuse" problems were seen by the public as more acceptable to endure punitive measures, such as jail time, and were also held more accountable for their drug use than participants referred to as having SUD (Kelly, Dow, Westerhoff, 2010, p. 814). Both people who hold positions of power and members of society should consider language when enacting policies and addressing issues surrounding SUD to ensure stigma from perpetuating.

#### **Stigma Associated with MAT**

While individuals with a SUD face significant stigma in their lives, those who utilize MAT in their treatment process face further stigmatization. A study conducted by Majer et al. (2018), collected participants from an Oxford House in Maryland to examine the viewpoints people in recovery have on MAT. Of the participants receiving MAT, 22% said someone who takes Methadone is still engaging in their SUD; however, those receiving MAT did not report that someone utilizing naltrexone or buprenorphine was still engaging in their SUD. (Majer et

al., 2018, pp. 574-575). In contrast, 49% of individuals who were not using MAT believed someone who is receiving buprenorphine/naltrexone is still engaging in active use (Majer et al., 2018, pp. 574-575). Sixty-eight percent of residents who were in recovery but not using MAT also believed that methadone patients were still in active use (Majer et al., 2018, pp. 574-575). This study suggests that individuals who do not use MAT may carry the stigmatizing belief that individuals who use MAT as a part of their recovery process are not entirely sober. Interestingly, individuals who were receiving MAT had stigmatizing beliefs towards those using Methadone specifically.

While stigma toward MAT from those with and without a SUD is prevalent, perhaps more important are the implications of stigma on a patient's treatment and recovery. The Center for Substance Abuse and Treatment (2005) states:

> "Stigma affects programs too. It prevents new programs from opening when community opposition develops. It can affect a program's internal operations. Staff members who work in OTPs sometimes absorb society's antipathy toward patients in MAT and may deliver program services with a punitive or countertherapeutic demeanor. OTPs must guard against these attitudes through supervision, education, and leadership efforts" (p. 9).

The process the Center for Substance Abuse and Treatment is referring to is known as countertransference, when a treatment professional projects his or her personal beliefs and thoughts onto a client, which can impact treatment (CSAT, 2005). Countertransference is an important aspect when it comes to addiction counseling, specifically when it comes to topics such as MAT, abstinence-only, and the 12-step program. If a counselor holds a specific viewpoint towards MAT, perhaps a negative one, this could have serious implications on

someone's treatment process who uses MAT and potentially cause someone to stop treatment (see Chapter 4). Magura and Rosenblum (2001) found that previous studies involving post-treatment outcomes indicate that "80% of patients who are opioid addicted and stop their medication for their opioid use disorder, resume daily drug use one year after treatment" (CSAT, 2005, p. 78).

Frank (2011) found that individuals in active use believed that the stigma associated with treatment programs that were not abstinence only 'were too great for them to engage'. Frank (2011) interviewed a total of 16 participants, all of whom were put into four different groups: people in recovery from OUD who were no longer using illicit opiates and were receiving methadone maintenance therapy, people in recovery from OUD who were currently using illicit opiates and receiving methadone maintenance therapy, people in recovery from OUD who were in a 12-step program <sup>8</sup> and not using illicit opiates, and people in recovery from OUD with no treatment program. Those who were involved with a 12-step program believed MAT, specifically methadone fails:

"to address the 'true nature' of addiction, which is a moral/spiritual problem that can only be address through complete abstinence, belief in a higher power, and participation in a 12-step program" (Frank, 2011, p. 11).

Further, those using an abstinence only program, felt as if they were superior to those who did access and use MAT (Frank, 2011). Not only does anticipated stigma prevent individuals from accessing treatment, but the social stigma perpetuated from those in abstinence

<sup>&</sup>lt;sup>7</sup> Abstinence only is a term referring to a recovery pathway that strays away from any and all substances, including MAT (Frank, 2011). MAT is a pathway that is considered not to be abstinence only. Alcoholics Anonymous and Narcotics Anonymous, commonly known as The Fellowship, are abstinence-only grounded treatment approaches (Frank, 2011).

<sup>&</sup>lt;sup>8</sup> The 12-Step program refers to Alcoholics and Narcotics Anonymous.
programs could translate into self-stigma among MAT patients (Frank, 2011). A participant utilizing methadone maintenance therapy spoke to the impact social stigma has had on their treatment experience with methadone, "Well, it's like for me, I don't tell my people at work, I'm embarrassed. I think they're gonna look at me in a totally different way" (Frank, 2011, p. 11) A common concern among participants who were engaging with methadone maintenance therapy<sup>9</sup> was the fear that if they messed up at work, it would be blamed on the fact that they receive methadone (Frank, 2011, p. 11). As a result, people felt ashamed to share that they were receiving methadone as a treatment for their opioid use disorder and kept it to themselves (Frank, 2011, p. 11).

Woo et al. (2017) examined perceptions of patients who utilized methadone maintenance therapy, finding that 56% of the participants who participated in the study said that stigma surrounding MAT affects their daily life (Woo et a.l, 2017, p. 5). Of the 18 participants, 78% said they have experienced stigma directly surrounding their methadone maintenance therapy (Woo et al., 2017, p. 5). As a result, 44% feel ashamed about being on methadone (Woo et al., 2017, p. 5) and a total of 28% say it affects the quality of their treatment (Woo et al., 2017, p. 5).

Sanders et al. (2013) examined dosages of methadone and stigma. Methadone patients were influenced by social stigma regarding the perception that methadone causes people to look like "zombies," influencing their self-perception of their treatment program. As a result, individuals utilizing methadone wanted to remain at a lower dose than their current one to prevent the feeling of "getting high" (Sanders et al., 2013). Similar to Frank (2011), Sanders et al. (2013) also found that patients receiving methadone treatment had a negative perception of those on a higher dosage than them, calling these such individuals: "crazy, greedy, and abusive."

<sup>&</sup>lt;sup>9</sup> Methadone maintenance therapy is the usage of Methadone to help maintain sobriety (Frank, 2011).

The use of MAT within treatment regimens remains highly underutilized (Hadland, Park, & Bagley, 2018). In 2012, 2.5 million Americans were physically dependent on opioids, but less than 1 million received MAT (Providers Clinical Support System, 2017). Unfortunately, there are healthcare professionals who refuse to prescribe and utilize MAT due to lack of support (Hutchinson et al., 2014). Reasons physicians provide concerning unwillingness to prescribe MAT include: lack of confidence, lack of psychological support, lack of specialty backup, and lack of institutional support (Hutchinson et al., 2014).

Further, regulations placed on physicians create additional barriers to prescribing MAT (Hutchinson et al., 2014). Physicians must complete a training that consists of multiple hours and parts to obtain a waiver to prescribe MAT (SAMHSA, 2019). The waiver certification is part of the SUPPORT Act which allows the prescription of buprenorphine in office-based settings to the appropriate clinical staff (SAMHSA, 2019). Doctors who complete the waiver requirement are allowed up treat up to 100 patients within the first year of receiving the waiver certification (SAMHSA, 2019). In order to be eligible for the waiver certification, a doctor must fulfill one of the two requirements: "holds a board certification in addiction medicine or addiction psychiatry" or "provides MAT in a 'qualified practice setting'" (SAMHSA, 2019, paras. 1-5). After the first year of certification passes, doctors may begin to see 275 patients (SAMHSA, 2019).

The requirements and regulations physicians must possess to prescribe MAT is an example of structural stigma. Currently, there are efforts in state legislatures to reduce this barrier to providing treatment. In Pennsylvania, Governor Tom Wolf exercised an agreement with seven of the largest health insurers in the state to end prior authorization requirements for MAT (AAFP, 2018). With this agreement, insurers will cover: "at least one buprenorphine-naloxone product, methadone as MAT, injectable and oral naltrexone, and at least one form of

nasal naloxone without quantity limits" without receiving pre-approval (AAFP, 2018, para. 3). Pennsylvania has developed a network of healthcare providers, known as PacMAT, that help facilitate access to MAT for people with SUD, as well as other treatment engagement services (Commonwealth of Pennsylvania, 2020).

Not only do physicians face limitations surrounding MAT, but patients receiving the treatment also face structural limitations associated with receiving MAT. Currently, Methadone is administered from daily clinics. Individuals may travel up to once a day, or two or three times a week, to receive their dose of Methadone depending on a doctor's orders (American Addiction Centers, 2019). Not only is this an inconvenience, but this creates a waiting system. In this process, many patients must stand outside a public clinic where dozens of other individuals are awaiting their dose. This process can reinforce social stigmas associated with this patient population, while diminishing confidentiality of the patient. This system can reduce a patient's willingness to engage in this form of MAT.

Lack of coverage and cost are also barriers to treatment for patients. Public and private insurers, independent of the advice from a physician, have required dosage and duration restrictions on Methadone, which can cause issues if an individual needs a higher dose for a longer period (Wakeman & Rich, 2017). Further, insurers have placed prior authorizations on MAT programs such as Buprenorphine (Wakeman & Rich, 2017). Prior authorizations require insurance approval before the medication can be dispensed. Therefore, those in urgent need of MAT would be not be able to receive it. For example, if someone was ready for treatment and they were seeking Buprenorphine MAT treatment as part of their treatment regimen based on physician recommendations, as a requirement of this therapy they must be substance free for 72 hours, which induces withdrawal syndrome. If they are denied their MAT after this 72-hour period due to lack of approval from insurance, due to their withdrawal symptoms, there is a high likelihood they would then relapse and create further delays in their recovery process.

## Conclusion

While there is evidence that MAT is the most effective method for treating SUDs, there remains a great amount of stigma toward its use (Majer et al., 2017). This stigma is operationalized in the form of social, self, and structural mechanisms (Lindgren, 2015), that can inhibit an individual from obtaining and seeking this treatment (Haland, 2018). Even within SUD recovery communities, MAT is stigmatized, further harming individuals who may seek this form of treatment (Majer et al., 2017). While this stigmatizing behavior has been measured in terms of prevalence (CSAT, 2005), what is lacking is a further understanding of the social and structural stigma origins that those within the recovery community hold towards those who utilize MAT in their recovery pathway. This research builds upon existing literature to fill those gaps in this understanding.

# Chapter 3

# **Research Question and Methods**

In the following chapter, the reader can find the research questions associated with this specific study. The participants in this study reflected those in recovery within the five-county Philadelphia region. The data collection process involved twenty-one in-depth qualitative interviews as the result of an extensive recruitment process, which can be found later in the chapter within data collection. The analysis utilized a modified grounded theory approach, using a set of predetermined codes, while also allowing for themes to emerge from the data. Finally, the limitations associated with the research include a limited participant pool and miscommunication surrounding the exclusion criteria among participants.

## **Research Questions**

Based on the results from the literature review, this study explored two research questions:

- 1. What are the perceptions associated with MAT of those within the substance use recovery community <sup>10</sup>who have not used MAT?
- 2. What are the origins of stigmatizing attitudes of those within the substance use recovery community toward MAT?

<sup>&</sup>lt;sup>10</sup> For the purpose of this study, the "recovery community" is referring to those who consider themselves to be in recovery from a substance use disorder.

#### **Study Population**

All participants in this study were adults (aged 18+), located in the five county Philadelphia region (Bucks, Chester, Delaware, Montgomery, and Philadelphia) and were in recovery from a substance use disorder. This geographic region represents some of the highest rates of fatal drug overdose within Pennsylvania and the country, indicating that use prevalence is high (DEA, 2019). Therefore, this region was chosen for its likely availability of potential participants. Further, these locations were due to a convenience sampling frame to ensure accessibility of participants of the study (Creswell, 2007).

Individuals in recovery from a substance use disorder were the primary target for determining an appropriate population for this research. Originally, recovery was thought of as abstinence only (Laudet, 2007). However, there are those that consider themselves in recovery from their primary drug of choice, but still use tobacco, alcohol, or marijuana (Benton, 2010). Recovery is subjective to the individual (Laudet, 2007). Rather than utilize a researcher-driven definition for determining recovery, the mechanism for determining recovery was individual identification with recovery. Participants consisted of individuals who were in recovery from a variety of substances: alcohol, heroin, opioids, benzodiazepines, cocaine, and crack-cocaine. All of the participants were in recovery for at least one year.

It was imperative to the study that the sample represented those in recovery from a substance use disorder because interest was stigma toward MAT within the recovery community, not the general public's perceptions. Participants included those who did not utilize MAT for an extended period or as a part of their recovery process because utilizing this method for recovery may impact their perceptions of MAT (Majer et al., 2017).

When speaking with individuals, some participants who stated they had not utilized MAT did utilize medication during the detoxification process, which is common, especially for opioid use disorder. These participants remained part of the study for two reasons: individuals believed they had not utilized MAT, it was simply a medical detox practice; and engaging with the medications associated with MAT is not the same as utilizing MAT for an extended period of time to aid in the recovery process.

### **Data Collection**

To identify participants, the recruitment process consisted of a combination of mass emailing a curated list of local county resources, inpatient and outpatient treatment facilities, therapeutic services, rehabilitation agencies, law enforcement agencies (i.e. probation offices and county correctional facilities), and local religious organizations. Participants could refer their acquaintances to participate in the study; this is known as chain-referral sampling, or snowball sampling (Heckathorn, 2011). If a participant knew someone who was interested, the referred individual would contact myself and the same screening process would occur. Social media platforms postings, such as Facebook, allowed for many people to reach out and seek more information about the study. Phone calls were utilized to connect to local organizations who did not have an email listed for a representative; this method for participant identification proved least effective as the majority of the phone numbers were either out of service or went straight to voicemail. Personal networking on social media and connections to the recovery community allowed for the largest recruitment of participants. All participants were offered a \$25 gift card as incentive to participate. A total of 718 emails and phone calls were conducted, with about 50 respondents, with a result of 21 successful interviews conducted. Of the participants who were asked how they heard about the study, almost all said social media. No one directly responded to the mass email recruitments.

Individuals were given a brief introduction as to what the intended purposes of the study were prior to being given a set of screening questions<sup>11</sup> which were administered and determination of eligibility<sup>12</sup> was made. These brief screening questions consisted of items such as age, gender, race, socioeconomic status, one's awareness of MAT, recovery status, geographic residential location, and MAT utilization in their recovery process. A specific question was asked to filter perceptions, positive or negative, to split people into two separate groups in order to be compared. By including both those who viewed MAT as positive and negative, a comparative analysis could be undertaken within this sample population, similar to other studies of this nature (Bukhari, 2011). Once the screening questions were administered and an individual was deemed eligible for participation, they were scheduled for an interview in a public location to ensure safety of the interviewer.

All participants gave verbal consent before participating in the interview, as reviewed and approved by the Penn State Human Subjects Research Institutional Review Board. All interviews were audio recorded and later transcribed by a professional service. Once the transcription was received, all audio-recordings were destroyed to protect the confidentiality of the participant. The length of the interviews varied from 20-45 minutes. A total of 21 interviews

<sup>&</sup>lt;sup>11</sup> Find a detailed list of the screening questions asked prior to participation in Appendix A on page 69.

<sup>&</sup>lt;sup>12</sup> If participants were not 18 years or older, not in recovery, did not speak English, did not reside in the 5 countyregion, and used MAT during their recovery process, they were not eligible to participate and were not scheduled for an interview.

were conducted across the five-county region, consisting of individuals from each county<sup>13</sup>: Bucks – 6, Montgomery – 5, Philadelphia – 4, Delaware – 4, and Chester – 2.

To collect the data from the study population, I used in-depth, semi-structured, open ended interviews (Creswell, 2007). The questions <sup>14</sup>asked during the interview probed for an individual's knowledge and personal thoughts about MAT, if they knew someone who used MAT, and if they saw it as an effective treatment for substance use disorder. The questions probed for their attitudes associated with MAT, as well as possible origins of their attitudes.

## **Data Analysis**

To analyze the transcripts a modified qualitative grounded theory approach was utilized. Grounded theory allows the researcher to produce a theory of a process, action, or interaction shaped by the views of participants (Creswell, 2007). In this research, a modified approach was utilized allowing for the researcher to also examine the data with a series of predetermined codes (Creswell, 2007). The predetermined codes<sup>15</sup> were first used to analyze the transcript data. Then, once finishing this codification process of the transcript data, the transcripts were analyzed using the grounded theory approach, allowing themes to emerge from the data according to patterns noted within and across participant responses.

The predetermined coding schema consisted of both positive and negative identifiers for the statements found throughout the interviews, as well as the types of stigma (social, self, and systemic) noted by participants. To formulate these predetermined codification schemas, I

<sup>&</sup>lt;sup>13</sup> A complete summary of the participants demographics can be found in Appendix D on page 73.

<sup>&</sup>lt;sup>14</sup> Find a full list of the predetermined questions asked throughout the interviews in Appendix B on page 70.

<sup>&</sup>lt;sup>15</sup> Find the full list of the coding schema utilized in Appendix C on page 75.

utilized the definitions of positivity and negativity toward MAT from existing descriptions of these attitudes in the literature An example from the schema associated with positive identifiers is: "Support for the use of Medication Assisted Treatment as an effective and valid way to treat substance use disorder." An example from the schema associated with negative identifiers consisted of the following: "Feeling as if people who use MAT are substituting one drug for another." To formulate the codes for the types of stigma, I utilized the definitions provided in my literature review.

This method was the best choice for this research because the data could not be explained in an easily quantitative format. The two research questions were developed to be exploratory in nature, as this body of research is less understood. By utilizing a grounded theory approach, the data from participants informs the theoretical underpinnings of the phenomenon of stigma, expanding this concept (Link & Phelan, 2001). Using direct quotes from the participants' interviews allowed for the findings to be authentic and genuine, preventing misinterpretation and fabricated data. Qualitative data allows for the participant's perspectives to be more authentically represented in greater depth than in quantitative studies, enabling a more nuanced understanding of phenomena than standardized responses (Creswell, 2007). While this sample may not be generalizable to broader populations, it can help to broaden the theoretical foundation of stigma related work, specifically within the domain of substance use disorder and MAT.

## Limitations

The participants for this study were from Bucks, Chester, Delaware, Montgomery, and Philadelphia counties. Thus, the results could be localized and not representative of populations more broadly; generalizations about the findings should be used with caution. The research only spoke with individuals in the recovery community who have not used MAT, but stigma towards MAT is also broader within society as well as those who have used MAT. Thus, this poses options for future research based on the results of this study. The majority of the participants were Caucasian and as a result, the data could be limited to one specific group of people. As mentioned earlier in the literature review, there was confusion surrounding the topics of recovery and the usage of MAT. This interaction with these medications could impact perceptions of its use within MAT. Finally, participants were allowed to self-define recovery. Some definitions consisted of complete abstinence and others defined recovery as abstinence from their preferred drug, which adds a level of subjectivity to the recovery categorization. However, recognizing there are multiple pathways to recovery, placing a specific definition on recovery could have placed a hierarchy on the types of recovery, increasing the stigma in which this researcher sought to examine and dismantle through this study.

## Conclusion

The methods utilized to examine stigmatizing attitudes within the SUD recovery community toward MAT utilized in-depth, semi-structured qualitative interviews to ensure a rich, robust dataset for analysis. Examining the phenomena of stigma and its origins requires a thorough probing of emergent respondent responses, which qualitative methods are best suited to address during data collection processes.

While utilizing different recruitment outlets, social media and personal connections seem to be most effective, over-all, the response rate through email recruitment was low. Utilizing an

incentive of a \$25 gift card increased participant willingness. A total of 21 interviews were conducted throughout the five-county Philadelphia region.

The best methodology for analyzing the data was the modified Grounded theory approach. This approach was the best fit because it allowed for the qualitative data to best explain itself and find common themes through-out the interviews, while allowing a pre-existing coding schema to also be applied in the analysis process. The coding schema applied to the data consisted of positive and negative categories, as well as types of stigma.

The noted limitations associated with the research, including a small sample size in terms of location and race, indicate that the generalizability of this research should be implemented with caution. However, the use of the knowledge generated from this research will help to advance opportunities to address localized stigmatizing attitudes within the study's geographic locality, as well as to broaden our understanding of the theoretical underpinnings of stigma more broadly, particularly toward MAT.

#### Chapter 4

#### Results

In this chapter, study findings are presented that answer the two research questions: What are the perceptions associated with MAT of those within the substance use recovery community <sup>16</sup>who have not used MAT? What are the origins of stigmatizing attitudes of those within the substance use recovery community toward MAT? Direct quotes from participants are utilized to provide examples from the qualitative data analysis. Key themes emerging included: beliefs surrounding the topic of MAT were negative and positive; language was a large determinant of the connotation associated with MAT attitudes. Beliefs ranged from support for the use of MAT to no support for the use of MAT; however, it was not as simple as showing support, it was more complex. Molding the responses into the schema was more complex than participants giving a clear-cut answer. Some participants felt as if MAT was better than using illegal substances; this could be interpreted as support.

## **Demographics of Study Population**

Seven<sup>17</sup> participants revealed they used medication during their detox experience and 14 shared that they went cold turkey<sup>18</sup>. It was decided that utilizing the medication associated with detox was not the same as engaging in MAT as a recovery pathway. The detox process is between 7-14 days and used specifically to reduce levels of a substance in a person's system to reduce risk of

<sup>&</sup>lt;sup>16</sup> For the purpose of this study, the "recovery community" is referring to those who consider themselves to be in recovery from a substance use disorder.

<sup>&</sup>lt;sup>17</sup> Prior to determining if those who used medication during their detox process were eligible to participate, four participants were told they were not eligible for taking medicine.

<sup>&</sup>lt;sup>18</sup> Cold turkey refers to when an individual detoxes off substances without any medication.

deleterious effects of subsistence, whereas MAT is a specific protocol utilized in treatment of a substance use disorder. It is common for those who enter a detox program to be given medication to help with the withdrawal symptoms, especially those who have an opioid use disorder.

The mean age of the participants who gave their age was 40.33 (n=18); three people chose not to share their age. Slightly over half of the participants were male (52%), and 48% were female. Participants fell into all socio-economic classes, based off the participants responses. All participants identified as Caucasian, except for one participant who identified as Asian.

## **Summary of Perceptions**

Prior to the interviews, individuals were asked to self-identify with their beliefs on medication-assisted treatment as negative, positive, or both. Six people believed their perceptions on MAT are positive. Five people felt that their thoughts towards MAT are negative. The remaining ten participants did not believe their perceptions were positive or negative, but rather both. The selfidentifying question associated with the pre-screening process is important to help measure a level of awareness with one's beliefs and the alignment between the two.

The following ubiquitous themes were discovered utilizing the pre-determined coding schema, laid out in the data collection section. All participants were given pseudonyms to protect the anonymity of the individuals and for their personal information to remain private.

### **Negative Perceptions**

*MAT is not effective in treating substance use disorder*. Forty-eight percent (n=10) of individuals openly stated they do not think MAT is effective in treating substance use disorder. All

participants who stated MAT was not a good treatment approach for substance use disorder identified with having ties to the 12-step program. Geoff stated that, "there isn't a chemical solution to a spiritual problem", which is a direct quote from the Big book – the scripture associated with the Fellowship. Two other participants felt that MAT did not address the spiritual aspect of addiction. One of the two, Ryland, states, "The other thing that concerns me is just that there isn't the spiritual aspect, there's not the community", and suggests individuals who use MAT also should attend 12step meetings.

*MAT should only be utilized for detox.* Some participants did find MAT effective and appropriate for detox only. Participants who were against MAT as long-term treatment believe it is okay to utilize MAT, during detox resulting in a 48% agreement rate (n=10). Similar to the belief that MAT should not be used long-term, concerns were raised that it is used too long.

*MAT is used for too long.* Sixty-two percent of individuals (n=13) had strong beliefs that MAT should only be used short-term and that that is not the case. There was a strong correlation between those who believed it was used for too long and other rules and beliefs they associated with the use of MAT. Jake said, "I feel like you should take MAT with the intention to eventually get off it." Lisa, the substance abuse counselor, said, "I almost feel like sometimes it's prolonging. I hate to say it, I feel like it's come down to we're really babying people." Similar to babying people, Jake felt as if there was no longer a need for a crutch after a certain point:

"At first, I was all for Suboxone to detox with. I don't believe, like I said earlier, I don't think that it should be used long term. I believe that once things are out of your system, there's no need for a crutch anymore and you really need to start working on yourself."

Steve almost seemed taken aback at the fact that people would be on MAT for an extended period of time, "Yeah there's a time limit on how long you...Obviously you taper down, what are you going to be on maintenance for the rest of your life?"

*People who utilize MAT are not truly sober*. One of the most prominent themes found across those who view MAT negatively was the ideation that these people were not achieving true sobriety. Seventy-one percent (n=15) of participants felt that those who used MAT are not truly sober. Susie stated, "I don't think they're sober because they're high. They're on some kind of substance. It's still a substance in your system. You're not clean." Some participants elaborated more than others when asked "Do you think people who use MAT are sober?", whereas Tom stated: "Absolutely not" when asked. Some participants, like Rachel, acknowledged it was not the same as using heroin, but there was still a connection: "I don't think being physically dependent on Suboxone is at all the same as being hooked on heroin. It's not at all the same, but you're still connected to that world."

*Feeling as if people who use MAT are substituting one drug for another*. Five participants (24%) distinctively shared that they believe MAT is a substitution for another substance. Dan said, "I never did Suboxone or anything like that. So I just figured there's no really point to it. Like why substitute one drug for another drug."

*Feeling as if MAT is a mind-altering substance.* Twenty-nine percent of participants (n=6) not only believed that those who use medication are not truly sober and substituting one drug for another, but that MAT is a mind-altering substance and produces feelings of euphoria.

*The only way to get sober is through abstinence-only.* Twenty-nine percent of participants (n=6) believed abstinence only is the only recovery pathway. This is often a mentality associated with the 12-step program. Hank believed that you cannot work on yourself using MAT, "Complete abstinence is the only way to really improve your life and work on yourself and be

okay with yourself". This goes hand in hand with the mentality that those who use MAT are not truly sober, and they are not as engaged in their recovery.

The belief that those who use MAT are not involved in their recovery.

Eleven people, 52%, had concerns that those who use MAT are not as involved in their recovery process. Examples included still engaging in compulsive behaviors, using other substances while taking MAT, not attending meetings, and a few others. Anne stated:

"I'm sponsoring somebody now, but I'm telling you, she just does what she wants to do, and I don't feed into it. She wants to meet up with me, we met up, we sat down, finally sat down. So I said, 'Tell me when you want to meet again.' I said, 'Wednesday or Thursday works for me.' She never got back to me. And then she'll get back to me with some boyfriend problem or some job problem or money problem or this or that. And I'm like 'When do you want to sit down and do some work?' And then I just told her again this week, 'Tell me what your schedule is' And I still haven't heard from her...[people using MAT] have no desire to change and they're still that same chaotic, unmanaged, out of their mind, all over the place people. Their lives are usually still unsettled."

This hints at the influence twelve-step programs have on those in recovery and their beliefs and actions surrounding people who use MAT. Another member who belongs to a 12-step program shared with me that after a certain amount of time, recovery on MAT does not feel authentic:

> "I found that people, there's a disconnect, where they are sober because this is MAT. It is part of their treatment. But after a certain amount of time, when we're

talking 18 months, two years, two and a half years, it doesn't feel authentic. Their sobriety doesn't feel genuine and it doesn't feel authentic."

A male participant, John, who also shared he is a member of the 12-step program, felt as if those who use MAT cannot fully be a part of the program; "When you're under the influence of a chemical, I don't feel like you can really have that awakening that the 12 steps talk about."

Eight of the individuals who felt as if MAT inhibits people from being involved in their recovery, believe those who use MAT have a greater chance of relapsing<sup>19</sup>. Lisa, a substance abuse counselor, shared her experience with her clients, "My experience with people who have been on Suboxone and start to taper off is they wind up relapsing and going to using. I've had more clients that that's happened to then haven't."<sup>20</sup> Jack had similar beliefs, but more about methadone specifically, "I hate to say it but like 90% of people that I see on Methadone end up going back out". Both experiences are based on personal experience, whereas current literature states the opposite.

In support of one medication, but not the other. Forty-three percent (n=9) of participants were in favor of one medication vs. the other. Over-half of participants (n=13) believe methadone maintenance is the worst MAT of the options. This is consistent with other research findings. There was a correlation between a few participants feeling as if methadone not only was the worst medication, but that they did not know anyone personally who was able to produce long-term recovery. Four participants commented on the physical appearance of individuals who use methadone. Drew believes methadone clinics are "like the walking dead" and "a place to breed unhealthy behavior". Scott expanded on the ideation of those who take methadone,

<sup>&</sup>lt;sup>19</sup> Going back out is another term referring to relapse.

"I began to look at it as just a crutch because then you notice people on methadone, they look just like people on heroin. They talk like them, they act like them. They get sick if they don't have it. It's the same thing. I look at it as a legal form of heroin."

Larry felt so confident in his ability to identify someone taking methadone stating, "People on methadone, I can walk out on the street and tell if someone is on methadone." He referenced the appearance of nodding out to describe how people on methadone look different.

Throughout reading the transcripts, it was determined that there was a hierarchy placed on the medications used to treat substance use disorder. Participants ranked the three most commonly used medications: Methadone, Suboxone, and Vivitrol, and stated which they thought was the best and which they thought was the worst. Hank believed all three medications were ok for detox, which includes methadone. The most common medications mentioned were Vivitrol and Suboxone. Seven of the nine individuals believed Vivitrol was the best option; because it was not a narcotic, there are no euphoric effects, and there is no potential for diversion. Only one participant, Rachel, thought Vivitrol was ineffective in treating substance use disorder and she believed Antabuse<sup>21</sup> was a better medication for those who suffer from alcohol use disorder. The other participants aside from the nine who thought better or worse of one medication than the other, believed buprenorphine was the best option.

*In support of those who use MAT having different treatment options.* A participant, Sean, who works in a recovery house, stated that those who use Vivitrol are not in the MAT house, but

<sup>&</sup>lt;sup>21</sup> This was the only participant of 21 who brought up Antabuse (Disulfiram). No participant brought up Acamprosate. Both of these medications are specifically for alcohol use disorder.

are in the general population recovery house (those who are abstinent-only focused). He goes on to further explain his recovery house's practice for those in the MAT house:

"Yeah. So how we have our house setup is we have a room specifically for the client's medications. And there's a hallway into it and then a little closet that you have a door on. The closet has a punch code key lock. There's a camera on it 24/7 and then when you open the door, each individual resident has a safe with a code in it. So, the house manager doesn't have the code to those safes. Only me and my general manager and the resident that is his safe. So it's on camera. So if you would go in there, you'd be on camera."

Four other individuals believed those who use MAT should have separate treatment options. Susie stated, "What they're doing right now is they're coming up with the groups that just are MAT groups, which I don't think it's a bad idea". Another participant felt as strongly as to say, "I think it should be separate, separate, separate".

*Stigma: Treating people differently who use MAT.* Perhaps the most important finding, the impact the stigma towards MAT has on those who use MAT. Here is an experience one of the participants, Katie, shared:

Referring to a young man at an NA meeting, "Then I remember one night, and he came every week, but nobody would fuck with him, and I didn't...I never went out of my way to talk to him either. In part, the social anxiety. I never would go up and start a conversation. And probably just a little sheep in the herd. No one else was talking to him, so I didn't either. I remember one night, he put his hand up to share from the floor, and he basically told that room about themselves. He was like, 'I come here every week for the same reasons you come here. It says that

the only requirement for membership is the desire to stop using. And I have that desire. I'm not using. He called out just how everybody made him feel different. I remember just listening, and I think most of the room just dismissed him, but I remember I felt him. I felt like how terrible that would feel and that he was right. He was being treated different. He was stigmatized and marginalized in this space that's supposed to be a safe place. Then he stopped coming. I found out months later that he died from an overdose, and I remember my first thought being, 'That didn't have to happen. We did this to him.'"

Another experience Pam shared,

"A lot of people ask me to sponsor them, people on Suboxone and I don't even know what to tell them. I have one girl, she's on Suboxone. I straight up told her...Now I have another one that just asked me, I haven't even answered yet. And it's because what I see that I don't respond. Do you know what I mean? But I look at them and I think to myself, 'That girl's whacked.' And I hear them sharing and sharing and blah blah, just all over, and I'm like 'They're whacked.' And I'm one of those people, I'll ask them, 'Are you on medication?' And 'No.' Now, I know you're a liar. So it's like, 'Nah.' So I just put you on the 'pay me no mind' list."

Both of these individuals were a part of the 12-step program and shared their experiences of isolating those who use MAT in the program.

Terry shared that sometimes he becomes a little aggressive,

"I should be more professional. Sometimes I'm just like you're a little shit. God forbid you got to wait five minutes to take your meds. I'm busy with another patient who's actually sick. Shut the fuck up and I'll help you when I can".

He later went on to explain an experience he shared with a nurse at the treatment facility he works at in regard to a patient, "I'm like you got to get off the sub. So me and another nurse would just make fun of him every night. We'd be like oh look who's here, 4:00 it's time. We treat him differently, but people in recovery, the nurses, when we hear someone's going on sub, we're just like oh. You're just, not taking the easy way out, but it's like we don't think this is the answer'". This provides support for the stigma toward MAT within the medical community.

## **Positive Perceptions**

*MAT is effective in treating substance use disorder*. Thirty-eight percent of participants (n=8), which is ten percent lower than those who deemed it as ineffective, support MAT as effective in treating substance use disorder. Some of these individuals believed it was also dependent on the individual. One participant stated, "It's dependent on the person and the circumstance in their life at that time". Katie spoke volumes to the power of medication-assisted of treatment by saying, "I really feel like it [MAT] can help people."

*MAT is a recovery pathway*. Forty-eight percent of participants (n=10) believe in multiple pathways of recovery, and MAT as being one of those pathways. Melissa acknowledged what worked for her does not mean it works for everyone else,

"The reality is that was his path, and it worked for him, and my path worked for me. We both wound up in the same place in terms of no longer having an opioid use disorder, having meaningful, fulfilling lives, really pursuing goals and dreams." Melissa was an individual who once thought negatively of those who use MAT, so she identified a change in heart. On a more promising note, an individual who works as an addiction counselor stated, "One of our philosophies was whatever your pathway is, that's awesome. How can we help you? It didn't really matter". They also offer MAT at their facility. This individual also belongs to a12-step program but was able to think outside of the community beliefs. <sup>22</sup> Eric, took a unique approach to the question and shared, "Everybody's trying to just accomplish the same goal, I don't think they're any less of a person for it."

*MAT is better than someone using drugs.* Nineteen percent of participants (n=4) believe MAT is better than using illegal substances. This is most associated with the practice of harm reduction. Individuals believed not only was it better than using illegal substances, but it helps to seize the behaviors associated with active use. Zack said, "But if you can't...if you need it and you can't do it any other way, then it's better than actually using drugs". Another participant, Kelly, went into detail about the reduction in harmful lifestyle because of MAT, "I do feel it's helping them not to live dangerously, use needles with different people, things like that. So I do think that it's changing that habit and hopefully, that will them to be able to get clean". Terry shared another strong testament about MATs effect on the reduction of harm, "My opinion is if it's saving your life and you're not going down to Kensington, sticking a needle in your arm, sleeping on the street, and dying, do it. You can't get recovery if you're dead", which goes hand in hand with the next significant finding.

*MAT saves lives*. Forty-three percent of participants (n=9) stated that MAT saves lives. Hank opened and shared the impact the opioid epidemic has had on his viewpoints, "But as this epidemic had gotten worse, totally shifted my thinking to say, 'Well, this is keeping somebody

alive, who am I to judge.' So now it's positive and if people need it, I encourage it". There are a significant number of advocates who have found positive outcomes associated with the opioid epidemic, one of those being MAT. Kristina shared a similar thought process, "So, and so many people are dying from opioids that, in that respect, I think it's helpful."

*MAT is dependent on the individual.* Thirty-eight percent of participants (n=8) believe MAT is not bad, it is dependent on the individual. Individuals believed that because one person is not successful with medication, does not mean MAT is not effective. It is the same as those who are abstinent for a significant amount of time and then relapse; it does not mean abstinence does not work. A whole modality should not be knocked because of one individual's bad experience. Josh acknowledge the good and the bad,

> "But then at the same time, it has saved a lot of people's lives and I guess helped a lot of people. I'm not going to say that because a couple of people who did it wrong, that means the whole program isn't correct".

*People who use MAT are sober*. Thirty-eight percent of participants (n=8) believed those who use MAT are sober. Again, this question is dependent on an individual's definition of sobriety. Below is a significant example of the definition of sobriety to one individual and the effect their definition has on those who use MAT. When asked if they think people who use MAT are sober:

"Yeah. If they're not abusing it, then yes because from my understanding, you're not getting high. You're not seeking it out. Someone who takes an antidepressant every day is specifically dependent on that, but I wouldn't call them a drug addict just because of that. To me, being sober is not just about what's physically in your body, it's how you're living your life and what means the most to you. If you're living your life for that hit of methadone every day, then yeah maybe it's not really working for you. But if someone is leading a productive life and actively working to make themselves better while taking Suboxone, then yeah I would say they're sober".

*Not in support of those who use MAT having separate treatment options.* Forty-three percent of participants (n=9) believe those who use MAT should not have separate treatment options. Rose, a female participant, used a unique analogy to describe her reasoning as to why this was not appropriate: "No, I don't think that's appropriate. I actually did not know that. It's like, can you imagine like a support group for people who are on Prozac versus people who just go to therapy? That's ridiculous". One gentleman who owns a recovery house shared the same thought and does not separate those who use medication from those who do not;

"The one thing I don't like is that treatment centers, I don't know specifically if they do this, but I've seen recovery houses where they segregate the MAT people, kind of life a MAT house. I don't do that. Why do you have a MAT house, why isn't it just a recovery house? I mean that's what it is".

A common fear associated with having these two groups in the same house is the ideation that those who are not using medication will be triggered. Melissa, who used to work in a recovery house, shared her thoughts on this,

> "So, what better of an environment to help someone identify coping skills for when they have that urge to use? If your goal is abstinence, you don't want to use, then how are you going to not use when you leave this? If someone's pretty far along in a recovery, you want to use, then let's talk about that, because it's not even about that person. It's about you."

Another treatment provider shared that separating those who use medication from those who don't is malpractice, "It's medical malpractice. No".

*Awareness of beliefs*. One of the screening questions participants were asked prior to participating in the study, was whether their beliefs associated with MAT were positive or negative. Something that was found was that individuals' identification of their beliefs were not always aligned with their thoughts. Fifty-two percent of participants' (n=11) self-identification of their beliefs did not align with what they said. Seven of those participants, 64%, identified their beliefs as positive or both positive and negative but were overall negative. Two participants identified their beliefs as negative or both positive and negative but were more positive. Ten out of 21 participants, 48%, beliefs did align with the answers they gave during the screening process.

## **Types of Stigma**

*Social stigma.* Perhaps one of the most prominent types of stigma noted was social stigma.<sup>23</sup> Over fifty instances of social stigma were noted. Perhaps the most obvious form of social stigma was the acceptance of one medication over the other, especially with collective agreement over the most widely accepted and the most widely not accepted medication. There seemed to be a collective agreement amongst participants as to what medication worked best, and which did not. For example, Vivitrol was cited as the best medication because it did not produce euphoric effects. Methadone was viewed most negatively amongst those with negative perceptions.

<sup>&</sup>lt;sup>23</sup> The coding associated with determining whether a comment was an example of social, systemic, or self-stigma can be found in Appendix E on page 75.

This further led to distancing from those who use or have used MAT. Debbie shared how she does not associate with people who use MAT,

"I know people, I just don't [support MAT]. Not because I won't, but it's just the people in my circle aren't those people. These are people that are clean, you know what I mean?"

Debbie felt that those who were on MAT were not sober and she wanted to surround herself with only people who were truly sober; therefore, she does not associate with people who use MAT. She went on to further explain,

"At the same time I'm not going to..I don't know I just don't find that we share the same interests. Somebody that's on something or doing whatever, they always need to go somewhere and do something. They can't really settle down and sit and it's that whole lifestyle. And the wheels are still turning. I'd rather just be with people that are like-minded and at least can sit and have a conversation without thinking about having to go and what I need to do and that can show me a better way to live."

This is a direct example of keeping people out from a certain group and choosing to isolate or cut a certain group of people from your life because of a certain attribute or characteristic. The notion of identifying someone as sober or not sober is an act of social stigma; putting people into a group because of a socially collected stereotype (i.e. choosing to isolate people who use MAT from the recovery community). Drew referred to those who use methadone as the "walking dead" because of the collective stereotype that is associated with MAT.

*Systemic stigma*. The next form of stigma that was most prominently found was systemic stigma, found mostly among those who are working in the treatment industry. Alex, referring to

the recovery house he works at, shared that he allows his clients who are on Vivitrol to be in their regular house, but separates those who use suboxone or methadone:

> "Just because it would be a trigger ...especially when guys are first on Methadone, they look extremely high. Right? And so yeah, we don't want our other guys around them, because it's a trigger that they could go out and use because of it."

MAT houses have been created because of the systemic stigma those are facing who use it: denial into homes, as well as certain treatment programs. The ostracization of those who use MAT could also been seen as furthering that stigma. The belief that those who use MAT should have separate treatment options is a clear example of systemic stigma. Kayla, an active member of the Fellowship, shared she had certain rules for those who use MAT if they wanted her to sponsor them:

> "I'm always willing to work with somebody as a sponsor, somebody on medication-assisted treatment, as long as they've got a plan to decrease, to actively decrease. But that's sort of the rule."

A designation of rules as to whether or not someone is willing to work with or support someone who is using MAT is an indication of stigma on the systemic level.

*Self-stigma*. There were minimal instances of self-stigma found; a total of six demonstrations of self-stigma were identified. One instance of self-stigma was when a participant, Tessa, was asked why she never considered MAT as an option for herself, she said,

"Because if I was getting sober, I just want it to be over. Yeah. I didn't want anything. I just wanted a different life. I didn't want to have to rely on anything." Julie also shared that she chose not to use methadone because of the fear she had, "I knew that I always had this preconceived fear of having to go to the methadone clinic every day for the rest of my life."

The ideation that somehow MAT modalities are something that people with substance use disorder need to be afraid of is a direct internalization of the social stigma founded within this research associated with methadone.

# Sources of Stigma

*Narcotics Anonymous & Alcoholics Anonymous*. Sixty-six percent of participants (n=14) identified NA or AA as a large contributor to the stigma associated with MAT. Eight participants, 38%, belonged to the program and thought negatively of it. All eight participants cited personal experiences for the reason they thought negatively of MAT. The most cited personal experience was that they have never seen anyone successful with it. Three participants, 14%, attend NA and AA meetings, but do not think negatively of MAT themselves, but say members of their program do. Three participants, 14%, shared they used to attend NA and AA meetings but stopped interacting with the Fellowship because of the stigma associated with those who use MAT. John shared,

"Yeah I've seen it in a 12-step meeting. I've seen it in the recovery house where guys make jokes and they're like, they say it's a joke but it looks like that's how they really feel about it."

Teddy also spoke on his experience with NA meetings, stating some of the things he had heard: "Just that they're not clean, they're still high. They shouldn't be there. Get out. [...] So I think they're more willing to let people in that just did a shot of dope than they are someone that is on Suboxone, which is crazy. [...] They will give you a hug, but if you show up on MAT, they're going to like not going to talk to you. It's crazy."

Among those who are a part of NA and AA, many of them shared they never saw longterm success amongst people in their lives who used MAT. Jared shared that he lost a friend to an overdose in a methadone clinic, so he had trouble grasping the idea of MAT being effective. Another participant, Jessie, said,

> "I don't know, I've just seen so many heroin addicts who have done a lot of that. Abuse the suboxone, sell the Suboxone to get the heroin, who then go into recovery, aren't doing the Suboxone. Now they're coming back out and now they're shooting meth."

Individuals within NA and AA had a clear indication that those who use MAT are not only not sober or in recovery, but are not necessarily successful in achieving recovery; therefore, it is difficult for those who use MAT to be a part of the program.

*Confidence in one's recovery.* Forty-three percent of participants (n=9) believe the stigma comes from those who have personal problems with their recovery. Participants shared various reasons as to why they thought those in recovery thought negatively of MAT. Some of these reasons included, self-esteem (wanted to make themselves feel better), fear of being triggered, projection of one's personal problems, and/or fear of using. Luke shared, "I think it can come through many different forms. Like some people are jealous. They think 'I want to do that." Ryan furthered this explanation by sharing similar thoughts,

"Well, what's worse and what underlies all of that is the insidious notion that somehow people who don't use MAT are at risk. That they're somehow in danger by breathing the same air as these people. What do you think is going to happen? If I want some of your meds, I can go get it in five minutes. That's not the problem. So what do you think's going to happen? [...] It's fear."

One participant, Lizzy, was honest enough to share with me that during her first month of sobriety she struggled being around someone who was on Suboxone,

"Well, I can say when I first got sober, maybe within my first month of sobriety, I was driving a girl around and she had Suboxone and I felt really uncomfortable, when I was very newly sober."

This ideation that people in recovery feel threatened by those who use MAT is not a reflection upon those who take MAT, it's possibly a reflection upon those who are shaming.

*Methadone treatment*. Ten percent of participants (n=2) believe the physical treatment of methadone maintenance adds to the stigma. When asked about methadone maintenance specifically, Luke said,

"Yeah. People were there at five o'clock in the morning, standing in a line that goes around the block [...] It absolutely adds to it and most of the clinics are not in the best place. It's not like you're going to Newtown or Yardley to get your methadone."

Perhaps seeing people lined up to see a medication in a neighborhood with a bad reputation adds to the public's stigma of methadone, as well as those who do not use MAT, because they may resent those furthering the stigma of those with substance use disorder.

*Physician's role.* Fourteen percent of participants (n=3) cited doctors as a part of the problem associated with MAT. Tara said,

"They're just saying, 'Okay, take this pill and it's going to help you.' It needs to be monitored or they need more medical assistance from professionals. [...] I think that we have to be our number one advocates of protecting ourselves from doctors".

Gracie shared some of the same words stating:

"Yeah. It's mismanaged. Yeah. I feel strongly in that it's for us to advocate for ourselves and our children's bodies. But I think at the point that you're newly sober – you're not really capable of sort doing that. You're broken, and if you're anything like me, you're scared."

Both stating very strongly that people with substance use disorders need to advocate for themselves, especially during their most vulnerable times, newly sober. Both of the participants who stated that they feel as if people who use MAT are being taken advantage of, think that MAT should be used for short-term use. Various participants stated that they feel as if doctor's continue to up the dosage of people who use MAT in order to keep them dependent. A participant, Jax, stated that he believes doctors do not engage enough with those who use MAT,

> "You might get an hour or two with the doctor, if you're lucky, and they're just handing you a script and saying, 'See you next month.' [...] There needs to be a little bit more fine tuning on how it's prescribed, how the patients are educated about it."

Jacqueline felt the same, sharing an experience with someone she knew,

"I think that a lot of times doctors just prescribe things to people and they're not getting help to stop the addiction. They're just saying, 'Okay, take this pill and it's going to help you.' It needs to be monitored or they need more medical assistance from professionals."

Participants shared they thought MAT was beneficial and maybe doctor's roles are not 100% clear.

*Basic demographics.* Ages of those who thought negatively of MAT ranged from 29-64 years. Eight female participants thought negatively of MAT and only two female participants thought positively. On the contrary, seven male participants thought negatively of MAT and four thought positively. Female participants thought more negatively of MAT than men. A total of two more male participants thought more positively of MAT than females. There was limited variability, so there were no findings associated with socio-economic status, as only seven participants felt comfortable answering. There were no findings to report with race, as 20 participants were Caucasian and only one was Asian.

## Conclusion

Prior to conducting this research, gender, age, and pathway to recovery were determined to be potential sources of stigma. I thought that perhaps those who were older and in recovery would think more negatively about MAT because they did not have access to it. I believed females would think more positively about MAT than males. I also thought that those who were abstinence-only would think more negatively of MAT. My first hypothesis, age, did not turn out to be significant. My second hypothesis, gender, was the opposite: males thought more positively about MAT than females. Those who were abstinence-only did tend to think more negatively about MAT than those who chose a different pathway to recovery. Participants showed less support than they had; with a 10% difference. Women tended to have a more negative perception of MAT than men, which was not as predicted; though it was a small difference. Age did not seem to have an impact. Common negative beliefs associated with MAT included: those who use MAT are not truly sober (71%) and MAT is used for too long (62%). Common positive beliefs associated with MAT included: MAT saves lives (43%) and there are multiple pathways to recovery, including MAT, (48%). Two of the most prominent identified sources of stigma that were noted were the Fellowship (i.e. 12 step programs) and one's confidence in their own recovery. A few isolated sources were noted, physician's roles, ignorance, and the physicality of obtaining methadone treatment. Over-all, a strong association between the Fellowship and stigma towards MAT was identified; whether, it was most negative comments coming from those who attend NA/AA or participants identifying the Fellowship as a large contributor of stigma.

# Chapter 5

# Discussion

The primary focus of this chapter is to share with the readers the findings, but also ask what now? This research will not only be presented, but explained, so that other colleagues and readers can understand the impact of the findings and where to go from here. Future studies or topics that should be explored will be discussed.

The findings associated with this research highlighted key indications of the stigma associated with MAT and where it comes from. Those in recovery who think negatively of MAT believe those who use MAT are not truly sober, not in recovery, not engaged in their recovery process, and attach damaging stereotypes. A small percentage of participants (38%) thought positively of those who use MAT. Thirteen participants, 62%, believed MAT was used for too long, despite research showing that those who stop MAT are at a higher risk of relapse (Magura and Rosenblum, 2001).

Given the feedback from participants, it was clear that two prominent sources of stigma were identified: NA and AA, as well as one's confidence in their own recovery. Individuals who were currently in the Fellowship identified with their negative beliefs, as well as two participants who stated they were a part of the Fellowship, but had stop attending because of the severity of the stigma associated with MAT and those who use it. The second prominent source, one's confidence in their own recovery, was cited by both people who have had this insecurity within their recovery, but others who have cited it simply as an observation. Lizzy specifically shared that she once felt uncomfortable in the car with a woman who was on Suboxone because she was newly sober; however, her perspective is now a positive one.

The stigma associated with MAT is killing people; one participant was so kind to share with us their story surrounding NA and the individual who was ostracized came to a meeting receiving methadone treatment, and ended up no longer attending meetings, overdosing, and dying. That same participant, Katie, shared the following:

> "I see this stigma surrounding drug use, surrounding substance use disorder, and surrounding the use as medications as far more deadly than even fentanyl. This stigma is really killing people."

Now that this research has been conducted, and we have received some findings, this research cannot just sit here. The question becomes, how do we get more people in recovery to think positively of it? Perhaps one of the most alarming findings was the idea that those who thought negatively of MAT also belonged to the Fellowship. The Fellowship is one of the most, if not the most, popular recovery pathways to exist, with the largest following. It would be difficult to work on the stigma associated with MAT, without the Fellowship being addressed. Moving forward, I suggest treatment facilities to work with the Fellowship to reduce systemic stigmatization of MAT and acknowledge there are multiple pathways to recovery. It should be optional for clients to determine if they wish to attend and NA or AA meeting. Perhaps the Fellowship should enforce their core beliefs that state "a desire to stop using is all that is required" and provide a person or person(s) non-biased to ensure those who are a part of meetings are not stigmatizing those with SUD any further. A mandatory discussion or meeting should be held at least once a month to discuss stigma and its implications, whether that is social, systemic, or self-stigma, to keep the conversation open and allowing individuals to get things off their chest; this will help to normalize the conversation.
When it comes to addressing the under-utilization of MAT amongst those prescribing it, I suggest all treatment facilities are required to offer all types of MAT. Similar to the opioidmonitoring program in place, doctors should be required to report how many patients they are treating, the type of MAT, the dosage, how frequently they see the patient, how long the patient visit is, and progress updates. This will be for prevention, so that doctors are not pushing prescriptions. In order to do this, more physicians need to be able to prescribe medications to treat SUD. SAMHSA should look into making the process of obtaining a waiver easier, as well as increasing the number of patients a physician is able to treat. An informational video training should be created and implemented into doctors waiver requirements to stay current surrounding MAT and SUD. This will ensure a larger population of the substance use disorder community is able to have access to what is considered the gold-standard of care.

There were a few unexpected findings that future studies should further explore. A further look into the 12-step program's role into the stigma associated with MAT should be noted, as it was an underlying theme in the study. The definition of recovery vs. sobriety should be further discussed and the impact it has on stigma. If someone defines recovery as complete abstinence, they will not see someone who is using harm-reduction practices as in recovery. As showed, there were many individuals who were interviewed that worked in the field that had negative viewpoints of MAT; clinician's viewpoints should be looked at as to how they impact the treatment of the patient. Especially since a few clinicians stated they would encourage individuals to taper off MAT, and this has detrimental effects on one's recovery process. As it was determined that methadone is the most stigmatized MAT, a further study should investigate why this stigma exists, when the literature shows it is one of the most successful medications. Nine out of the 21 participants had a clear disconnect between how they identified with their

beliefs (positive and negative) and their words. A further study should look at levels of selfawareness and stigma, as well as an individual's own recovery and their self-confidence, since self-confidence was an identified source of stigma. Like self-confidence, NA and AA were both identified as a source of stigma, further research should analyze whether AA or NA is a bigger contributor than the other. There are numerous contributors to stigma, especially with substance use disorder, and further research could continue to shed more light on sources of stigma. *"Group think"*. Two participants who have ties to NA/AA think positively of MAT. One person is actively still a member of the Fellowship, and the other individual is no longer attending meetings, and notes because the stigma associated with MAT got so bad. Perhaps future research should look at levels of impression or need to belong amongst those who have a substance use disorder; as well as, whether or not members' of the Fellowship had these beliefs prior to NA or AA.

#### Conclusion

Stigma associated with MAT is contributing to the under-utilization of MAT from both prescribers and patients. The stigma associated with MAT is also contributing to the loss of lives amongst the substance use disorder community. The substance use disorder community must work together with the Fellowship to create a better relationship amongst ALL people with substance use disorders, not just those who are abstinence-only. The implementation of different pathways of recovery should be implemented amongst treatment facilities; giving patients the option to utilize MAT. Perhaps, more community conversations should be held amongst the substance use disorder community to reflect upon their beliefs and the impacts they could have on the ones surrounding them. There are many areas for future research that could better explain the level of stigma that exists surrounding MAT, both at the macro and micro level.

# Appendix A

#### **Screening Questions for Potential Participants**

Thank you for your interest in this study. Before we can schedule you for an interview, we have seven brief screening questions.

- 1. Are you at least 18 years old?
- 2. Do you reside in the 5-county region (Bucks, Montgomery, Chester, Delaware, or Philadelphia)?
- 3. Do you fluently speak English?
- 4. Are you currently in recovery from a SUD (including alcohol)?
- 5. Are you aware of MAT (MAT)?
- 6. Would you say you have a positive or negative opinion toward MAT?
- 7. Have you ever used MAT as a part of your recovery process?

If all answers are yes for 1-5, if question 6 was either positive or negative, and if 7 indicates no, then the participant may be scheduled for an interview. If we have reached capacity for the county in which a person resides (5 per county), indicate they will be placed on a list of possible participants and we will be in touch within the next several weeks.

## **Appendix B**

## **Interview Questions for Participants**

To begin, we have some demographic questions we would like to cover.

- 1. What is your age?
- 2. What is your race?
- 3. What is your gender?
- 4. Would you consider yourself to be lower, middle, or upper class, in terms of socioeconomic status?

Now I would like to transition into learning more about who you are and about your experience with SUD.

- 5. Can you tell me a little bit about your background? (probe for where they grew up; family life; life overall experiences)
- 6. Can you tell me about your experience with SUD?
- 7. Can you tell me about your recovery process? How long have you been in recovery?
- 8. What do you know about MAT, sometimes referred to as MAT?
- 9. Do you know anyone who uses or has used MAT?
  - a. If so, in what relation are they to you?
- b. Was it a positive or negative experience?
- 10. Do you think MAT is effective in treating SUD?
- 11. What are your own personal beliefs toward MAT? (probe for why they feel this way, how they developed these beliefs)
- 12. What are your feelings towards individuals who utilize MAT?
- 13. Do you think that treatment facilities should have different policies for those who use MAT?
- 14. Have you ever treated anyone differently because you knew they were using MAT?
- 15. Have you ever discussed MAT with anyone?
  - a. What was the purpose? (educational, personal discussion, treatment option)
- 16. Is there anything else about your experience you would like to let me know that we have not yet captured?

# Appendix C

## **Coding Schema**

### Positive -

- 1. Support for the use of MAT as an effective and valid way to treat SUD.
- 2. Indicating there are multiple pathways to recovery, and MAT is one of those pathways.
- 3. Supporting the use of MAT in comparison to another illegal substance.
- 4. Feeling as if MAT allows individuals an opportunity at recovery.
- 5. Feeling as if MAT gives individuals a second chance at life.
- 6. Feeling as if stigma towards MAT is killing people.
- 7. Feeling as if stigma towards MAT is an act of discrimination.
- 8. Feeling as if MAT saves life.
- 9. Not in favor of people who use MAT having separate treatment options.
- 10. Feeling that MAT decreases the dangerous lifestyle of addiction.
- 11. Belief that MAT allows people to live more productive lives.
- 12. Not treating people differently who utilize MAT.
- 13. Believing people who use MAT are sober.
- 14. Believing that MAT isn't bad it's dependent on the individual.

Negative -

- 1. Lack of support for the use of MAT as an effective way to treat SUD.
- 2. Showing fear of individuals who are abstinent being triggered by those who utilize MAT.
- 3. Feeling as if people who use MAT are substituting one drug for another.
- 4. Believing people who use MAT aren't truly sober.
- 5. Belief that MAT prevents people from being engaged in the recovery process.
- 6. The ideation that people who utilize MAT have a different physical appearance than those who don't.
- 7. Belief that people are physically dependent on MAT.
- 8. Belief that people develop compulsive behaviors due to the use of MAT.
- 9. The ideation that people who use MAT have a higher chance of relapsing.
- 10. The belief that people take MAT for too long.
- 11. The belief that MAT should only be used for detox.
- 12. Feeling as if MAT doesn't produce long term recovery.
- 13. Feeling as if MAT is a mind-altering drug and produces euphoric effects; and this is the reason for people to utilize it.
- 14. Feeling a sense of superiority to those who use MAT.
- 15. Feeling as if abstinence only is the best way or the only way.

- 16. Thinking lesser of those who use MAT as a person.
- 17. Feeling as if people's recovery isn't authentic that use MAT.
- 18. Supporting the implementation of separate treatment options for those who use MAT.
- 19. Believing Methadone is the worst option for MAT.
- 20. Treating people negatively who have used MAT.
- 21. Believing Suboxone has a street value that addicts utilize to get high or avoid being sick.
- 22. Believing there's a time and a place for MAT only detox.
- 23. In support of one medication, but not the other.
- 24. The ideation that it's ok for others, but not for me.

# Appendix D

# **Summary of Demographics**

# Table 2

# **Table 2: Summary of Demographics**

Gender	Age	Race	County
Male		Caucasian	Chester
Female	31	Caucasian	Bucks
Female	38	Caucasian	Philadelphia
Female	59	Caucasian	Philadelphia
Female	33	Caucasian	Philadelphia
Male	37	Caucasian	Delaware
Male	29	Caucasian	Bucks
Female	56	Caucasian	Bucks
Female	64	Caucasian	Bucks
Male	29	Asian	Philadelphia
Female	62	Caucasian	Chester
Male	29	Caucasian	Delaware
Male	36	Caucasian	Montgomery
Male		Caucasian	Delaware

38 32	Caucasian Caucasian	Montgomery Montgomery
32	Caucasian	Montgomery
39	Caucasian	Montgomery
37	Caucasian	Delaware
29	Caucasian	Montgomery
48	Caucasian	Bucks
	Caucasian	Bucks
	37 29	37Caucasian29Caucasian48Caucasian

# Appendix E

### **Coding Schema – Sources of Stigma**

- 1. Social stigma: "A societal process in which individuals within a society collectively apply stereotypes to an identifiable group" (Crapanzano et. al (2019), p. 1).
- 2. Self-stigma: A subjective process that is 'characterized by negative feelings (about self), maladaptive behavior, identity transformation or stereotype endorsement resulting from an individual's experiences, perceptions, or anticipation of negative social reactions' on the basis of stigmatized social or health condition" (Livingston et al., 2011, p. 29).
- Systemic stigma: "The rules, policies, and procedures of institutions that restrict the rights and opportunities for members of stigmatized groups" (Livingston et al., 2011, pp. 39-40).

#### **BIBLIOGRAPHY**

- Abed, R. T., & Neira-Munoz, E. (1990). A survey of general practitioners' opinion and attitude to drug addicts and addiction. *British Journal of Addiction*, 85, 131-136.
- Addiction Center. (2019). *Acamprosate for alcoholism treatment*. Retrieved from: https://www.addictioncenter.com/alcohol/acamprosate/
- American Addiction Center. (2019). *How inpatient alcohol treatment can help*. Retrieved from: <u>https://americanaddictioncenters.org/alcoholism-treatment/inpatient</u>
- American Addiction Center. (2019). *Quitting heroin cold turkey: Withdrawal symptoms, risks, and detox*. Retrieved from: https://americanaddictioncenters.org/heroin-treatment/cold-turkey

American Addiction Center. (2019). *Suboxone*. Retrieved from: https://americanaddictioncenters.org/suboxone/subutex-suboxone

- American Addiction Center. (2019). *Types of therapy used in treatment*. Retrieved from: <u>https://americanaddictioncenters.org/therapy-treatment</u>
- American Psychiatric Association. (2013). Opioid use disorder diagnostic criteria. *Diagnostic and Statistical Manual of Mental Disorders 5:*1-9. Retrieved from: <u>https://www.aoaam.org/resources/Documents/Clinical%20Tools/DSM-</u> <u>V%20Criteria%20for%20opioid%20use%20disorder%20.pdf</u>
- American Psychological Association (Producer). Speaking of psychology: Treating the whole person [Audio podcast].

- Baser, O., Chalk, M., Fiellin, DA., & Gastfriend, DR. (2011). Cost and utilization outcomes of opioid-dependence treatments. *The American Journal of Managed Care*, 8, S235-248.
- Beauvais F., Spooner S. & Oetting E.R. (1991). The role of the psychologist on the drug user treatment team. *The International Journal of the Addictions* 26(11), 1137-1158.
- Benton, S. (2010). Being "sober" versus being in "recovery". Retrieved from: <u>https://www.psychologytoday.com/us/blog/the-high-functioning-alcoholic/201005/being-</u> <u>sober-versus-being-in-recovery</u>
- Buchman, D., & Reiner, P. B. (2009). Stigma and addiction: Being and becoming. *The American Joural of Bioethics*, 9(9), 18-19. DOI: 10.1080/15265160903090066

Bukhari, S. A. H. (2011). What is comparative study. Retrieved from SSRN-id1962328%20(1).pdf

Crapanzano, K. A., Hammarlund, R., Ahmad, B., Hunsinger, N., & Kullar, R. (2019). The association between perceived stigma and SUD treatment outcomes: A review. *Substance Abuse and Rehabilitation*, *10*:1-2

Center for Disease Control (CDC). (2019). Opioid overdose.

Center for Disease Control (CDC). (2019). Drug overdose deaths.

Center for Substance Abuse Treatment. (2005). MAT for opioid addiction in opioid treatment programs. SAMHSA/CSAT Treatment Improvement Protocols, Report No.:12-4214.
 Rockville (MD): Substance Abuse and Mental Health Services Administration. Retieved from <u>https://www.ncbi.nlm.nih.gov/books/NBK64164/</u>

Commonwealth of Pennsylvania – Open Data. (2020). *Expanding access to treatment*.

- Connock, M., Juarez-Garcia, A., Jowett, S., Frew, E., Liu, Z., Taylor, RJ., Fry-Smith, A., Day, E., Lintzeris, N., Roberts, T., Burls, A., & Taylor, RS. (2007). Methadone and buprenorphine for the management of opioid dependence: A systematic review and economic evaluation. *Health Technology Assessment*, 11(9), 1-171.
- Connor, J. P., Gullo, M. J., White, A., & Kelly, A. B. (2014). Polysubstance use: Diagnostic challenges, patterns of use and health. *Current Opinion in Psychiatry*, 27(4), 269–275. https://doi.org/10.1097/YCO.000000000000069
- Corrigan, P. W., Watson, A. C., & Miller, F. E. (2006). Blame, shame and contamination: The impact of mental illness and drug dependence stigma on family members. *Journal of Family Psychology*, 20(2), 239-246.
- Corrigan, P.W., Kuwabara, S.A., & O' Shaughnessy, J. (2009) The public stigma of mental illness and drug addiction: Findings from a stratified random sample. *Journal of Social Work, 9*(2), 139-147
- Department of Health and Human Services. Opioid drugs in maintenance and detoxification treatment of opiate addiction. Federal Register. 2001;66:2076–4102.
- Diaper, A. M., Law, F. D., & Melichar, J. K. (2014). Pharmacological strategies for detoxification. *British Journal of ClinicalPpharmacology*, 77(2), 302–314. https://doi.org/10.1111/bcp.12245

Drug Enforcement Administration Diversion Control Division. (2019). Buprenorphine.

Drug Enforcement Administration. (2019). National drug threat assessment.

Drug Policy Alliance. (N. D.) Stigma and people who use drugs.

- Earnshaw, V. A. (2019). *Methods for understanding and addressing stigma to prevent common risk factors for disease* [Powerpoint Slides].
- Federal Drug Administration. (2018). FDA approves first generic version of suboxone sublingual film, which may increase access to treatment for opioid dependence.
- Gorman M. & Morris A. (1991) Developing clinical expertise in the care of addicted patients in acute care settings. *Journal of Professional Nursing* 7(4), 246-254.
- Haland, S. E., Park, T. W., & Bagley, S. M. (2018). Stigma associated with medication treatment for young adults with opioid use disorder: A case series. *Addiction Science & Clinical Practice*, 13:15. DOI: 10.1186/s13722-018-0116-2
- Hutchinson, E., Catlin, M., Andrilla, C. H., Baldwin, L. M., & Rosenblatt, R. A. (2014). Barriers to primary care physicians prescribing buprenorphine. *Annals of family medicine*, *12*(2), 128– 133. doi:10.1370/afm.1595

Juergens, J. AAFP. (2018). Pennsylvania moves to cut administrative burden on MAT.

Kelly, J. F., Dow, S. J., & Westerhoff, C. (2010). Does our choice of substance-related terms influence perceptions of treatment need? An empirical investigation with two commonly used terms. *Journal of Drug Issues*, 40(4), 805-818.

Krall, L. A. (2006). Safely discontinuing opioid analgesics.

- Laudet A. B. (2007). What does recovery mean to you? Lessons from the recovery experience for research and practice. *Journal of substance abuse treatment*, 33(3), 243–256. https://doi.org/10.1016/j.jsat.2007.04.014
- Lee, J. D., Friedmann, P. D., Kinlock, T. W., Nunes, E. V., Boney, T. Y., Hoskinson, R. A. Jr.,
  Wilson, D., McDonald, R., Rotrosen, J., Gourevitch, M, N., Gordon, M., Fishman, M., Chen,
  D, T., Bonnie, R, J., Cornish, J. W., Murphy, S. M., and O'Brien, C. P. (2016). Extendedrelease naltrexone to prevent opioid relapse in criminal justice offenders. *The New England Journal of Medicine*, *374*, 1232-1242.
- Lindgren, B. M., Eklund, M., Melin, Y., & Graneheim, U. H. (2015). From resistance to existence Experiences of MAT as disclosed by people with opioid dependence. *Issues in Mental Health Nursing*, 32:12, 963-970. DOI: 10.3109/01612840.2015.107479
- Link, B. G., & Phelan, J. (2014). Stigma power. *Social Science & Medicine*, *103*, 24-32. DOI: 10.1016/j.socscimed.2013.07.035

Link B., & Phelan J. (2001). Conceptualizing stigma. Annual Reviews in Sociology, 27:363–385.

Livingston, J. D., Milne, T., Fang, M. L., & Amari, E. (2011). The effectiveness of interventions for reducing stigma related to SUDs: A systematic review. *Addiction*, 107, 39-50. DOI: 10.1111/j.1360-0443.2011.03601.x

Livengrin Foundation. (2020). After inpatient rehab or detox, where do I go?

- Majer, J. M., Beasley, C., Stecker, E., Bobak, T. J., Norris, J., Nguyen, H. M., Ogata, M., Siegel, J., Isler, B., Wiedbusch, E., & Jason, L. A. (2017). Oxford house residents' attitudes toward MAT use in fellow residents. *Community Mental Health Journal, 54*, 571-577. DOI: 10.1007/s10597-017-0218-4
- Magura, S., and Rosenblum, A. Leaving methadone treatment: Lessons learned, lessons forgotten, lessons ignored. Mount Sinai Journal of Medicine 68(1):62–74, 2001.
- Mateos-Aparicio, P., & Rodríguez-Moreno, A. (2019). The Impact of Studying Brain Plasticity. *Frontiers in cellular neuroscience*, *13*, 66. doi:10.3389/fncel.2019.00066
- Merrall, E. L., Kariminia, A., Binswanger, I. A., Hobbs, M. S., Farrell, M., Marsden, J., Hutchinson, S. J., & Bird, S. M. (2010). Meta-analysis of drug-related deaths soon after release from prison. *Addiction (Abingdon, England)*, 105(9), 1545–1554.
- Miller W.R. (1983) Motivational interviewing with problem drinkers. *Behavioural Psychotherapy 11*(2), 147-172.

Narcotics Anonymous. (2020). Information about NA.

National Alliance on Mental Illness. (2018). Naltrexone.

- National Alliance on Mental Illness. (2016). Buprenorphine, naloxone (suboxone). Retrieved from: https://www.nami.org/Learn-More/Treatment/Mental-Health-Medications/Types-of-Medication/Buprenorphine/Buprenorphine-Naloxone-(Suboxone)
- The National Alliance of Advocates for Buprenorphine Treatment. What's this agonist/antagonist stuff?

National Drug Intelligence Center. (2006). Is abusing methadone illegal?

National Institute on Alcohol Abuse and Alcoholism. (2008). Addiction stigma language – The words we use matter. Reducing stigma through language.

National Institute on Alcohol Abuse and Alcoholism. Alcohol use disorder.

National Institute on Alcohol Abuse and Alcoholism. (2017). *What medications are used to treat alcohol use disorder?* 

NIDA. (2016). Understanding Drug Abuse and Addiction: What Science Says

NIDA. (2014). MAT reduces HCV incidence in young adult injection drug users.

- Newman, R. J. (2012). Take-home "privileges" for methadone maintenance patients: Policies versus practice. *The Journal of Addiction Medicine*, 6(4), 318. doi: 10.1097/ADM.0b013e31826d93b5
- O'Brien C. P. (2009). Neuroplasticity in addictive disorders. *Dialogues in clinical neuroscience*, *11*(3), 350–353.

Prochaska, J. O., & DiClemente, C. C. (1982). Transtheoretical therapy: Toward a more integrative model of change. *Psychotherapy: Theory, Research and Practice, 19*(3), 276-288.

Providers Clinical Support System. (2017). Why is MAT underused?

Psychology Today. (2017). Sublocate: Directionally positive but not a panacea.

Rudski, J. (2016). Public perspectives on expanding Naloxone access to reverse opioid overdose. *Substance Use & Misuse*, *51*(13), 1771-1780.

SAMHSA. (2019). Buprenorphine training for physicians.

SAMHSA. (2019). MAT (MAT).

SAMHSA. (2020). Medication and counseling treatment.

SAMHSA. (2019). Mental health and SUDs.

SAMHSA. (2019). Naloxone.

Substance Abuse and Mental Health Services Administration. Leading Change 2.0: Advancing the Health of the Nation 2015-2018. Rockville, MD: Author; 2014. [March 2016]. <u>http://store .samhsa.gov/shin/content//PEP14-LEADCHANGE2/PEP14-LEADCHANGE2.pdf</u>.

Soverow G., Rosenberg C.M., Ferneau E. (1972) Attitudes towards drug and alcohol addiction: patients and staff. *British Journal of Addiction* 67(3), 195-198.

The New York Times. (2013). Addiction treatment with a dark side.

Thomas, S. (2019). What to know about methadone clinics. American Addiction Centers.

- Tsui, J. I., Evans, J. L., Lum, P. J., Hahn, J. A., & Page, K. (2014). Association of opioid agonist therapy with lower incidence of hepatitis C virus infection in young adult injection drug users. *JAMA internal medicine*, 174(12), 1974–1981. https://doi.org/10.1001/jamainternmed.2014.5416
- Wakeman, S. E., & Rich, J. D. (2018). Barriers to medications for addiction treatment: How stigma kills. Substance Use & Misuse, 53:2, 330-333. DOI: 10.1080/10826084.2017.1363238
- Witte, T. H., Wright, A., & Stinson, E. A. (2019). Factors influencing stigma toward individuals who have SUDs. *Substance Use & Misuse*, 54:7, 1115-1124. DOI: 10.1080/10826084.2018.1560469
- Woo, J., Bhalerao, A., Bawor, M., Bhatt, M., Dennis, B., Mouravska, N., Zielinski, L., & Samaan, Z. (2017). "Don't judge a book by its cover": A qualitative study of methadone patients' experiences of stigma. *Substance Abuse: Research and Treatment*, 1-12.
  DOI: 10.1177/1178221816685087
- Woods, J.S., & Joseph, H. (2015). Stigma from the viewpoint of the patient. *Journal of Addictive Diseases*, 34:2-3, 238-247. DOI: <u>10.1080/10550887.2015.1059714</u>
- Yokell, M. A., Zaller, N. D., Green, T. C., & Rich, J. D. (2011). Buprenorphine and buprenorphine/naloxone diversion, misuse, and illicit use: An international review. *Current* <u>Drug Abuse Reviews, 4(1), 28.41.</u>

# ACADEMIC VITA

# ERIN BERGNER

# E: erinbergner.leah3@gmail.com

# **EDUCATION:**

# The Pennsylvania State University, Schreyer Honors College, Abington Campus, PA Bachelor of Arts in Psychological and Social Science

• Dean's List all semesters

Honors Thesis: Assessing Stigma Associated with MAT in The Recovery Community

# Central Bucks High School East, Doylestown, PA

High school diploma

# WORK EXPERIENCE:

# Child & Family Focus – Respite Provider, Willow Grove, PA

March 2018–March 2019

• Provided relief services to families with children who had intellectual disabilities; played educational games with the children; taught them ABC's, how to count, and talk; bathed, fed, and changed diapers and clothed

## <u>Criminal Justice Research Center at Penn State Abington – Research Assistant, Abington, PA</u> <u>2017– Present</u>

• Management of the Share Your Opioid Story Website & email account; Community Engagement through conversation; Input data regarding drug arrests; Upload and edit submitted stories; Promote personal story; Connect with participants; Conduct personal research; Assist with various research projects

# **GRANTS:**

Chancellor's Grant – Penn State Abington, PA

# AWARDS:

**Abington Impact Award** – *Penn State Abington, PA* 2019

# ACADEMIC & PROFESSIONAL MEMBERSHIPS:

Psi-Chi, International Psychology Honors Society (2017) Civitas Victus Dictio, Honors Society (2017)

# **ADVOCACY:**

<u>Share Your Opioid Story Initiative –</u> http://shareyouropioidstory.com/erin-b-bucks-county-pa/

Independence Blue Cross: <u>Someone You Know Campaign –</u> <u>https://www.youtube.com/watch?v=0jCyXOSdGtQ&t=22s</u>

Independence Blue Cross - Someone You Know Campaign

• Day on the Capitol: Speaking with the legislators of Pennsylvania on SUD policy and responses to the opioid epidemic

Penn State News – News article

• Abington honors student shares story of opioid addiction to support others

# **ENHANCEMENT OF EDUCATION EVENTS:**

Active Minds – *Conference* Promoting awareness on college campuses about mental health

**Doylestown Hospital** – *Mental Health Series* Understanding & Overcoming Addictive Behaviors; Impact of Substance Abuse on the Family

**Independence Blue Cross Foundation** – *Conference* Someone You Know: Facing the Opioid Crisis Together

**O'Neill Institute for National and Global Health Law at Georgetown University Law Center** – Webinar Series Addiction Policy & Practice in the Time of COVID-19

# Pennsylvania Harm Reduction Coalition – Conference

A Safety-First Approach to The Overdose Crisis

**Pennsylvania Harm Reduction Coalition** – Webinar Series Opioid Response Advocacy Forum

# **CERTIFICATES:**

"Enhancing Addiction Recovery: Reducing the Stigma and Harm" "Suicide Prevention" QPR

# **VOLUNTEER OPPORTUNITIES**

### A Woman's Place – Doylestown, PA

• A thrift store and community organization dedicated to providing resources and proceeds to local women shelters in Bucks County

### Kensington Storefront – Kensington, PA

• A local community organization where Philadelphian's suffering from homelessness and addiction can come for treatment access, art, and music therapy

## Angels In Motion – Chalfont, PA

• A community organization dedicated to improving the lives of those experiencing addiction by providing them with treatment access, clothing, food, and access to hygiene care