

IMPACT OF OPIOIDS ON HEALTH AND WAYS TO OVERCOME THE ADDICTION

by

Kennedy Alajemba

A Dissertation Presented in Partial Fulfillment

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## ABSTRACT

**Background:** The opioid crisis in the United States has affected millions of individuals, causing high levels of opioid addiction among the population. With the onset of synthetic opioids, deaths from opioid-related causes have increased drastically. This study aims to understand the effect of opioid addiction and methods of controlling the problem for adult African Americans and Latinos at Pathways to Recovery Counseling and Education Services, Hazleton, Pennsylvania.

**Methods:** The theories guiding this study are the Intersectionality Model and the Bay Area Regional Health Inequalities Initiative (BARHII) model. These theories reveal that factors such as age, ethnicity, and gender have a significant impact on opioid misuse patterns.

**Results:** The study revealed that opioid addiction negatively impacted cognition, social life, and emotional control, as 45% of the participants felt isolated from friends and family, 35% of the participants experienced anger issues and frequent arguments, loss of employment among 30%, and an increased tendency to engage in crime, evident by the fact that 30% of the participants had been to prison or a correctional facility. About 60% of the participants started using opioids to control physical pain and emotional trauma, while 55% obtained non-prescription opioids from illegal sources. Gender did not appear to have an impact on opioid use, as men and women showed a similar pattern of using opioids.

**Conclusion:** The use of opioids among adult Latinos and African Americans was influenced by their ethnicities, in addition to other factors, which limited their ability to access quality health services from healthcare facilities.

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## Dedication

This work is reverently dedicated to God Almighty, the source of wisdom and the foundation of my strength. It is through His graciousness that I have been endowed with the ability, patience, and perseverance necessary to traverse the challenging path of doctoral studies. From the genesis of this journey to its culmination, His unending presence has been my guiding light and steadfast support.

To the one who is all-knowing, who has been my refuge in times of uncertainty and my inspiration in moments of doubt, I offer my deepest gratitude. May this dissertation not only stand as a testament of my academic endeavors but also as a reflection of the divine grace that has sustained me from the beginning to the end.

“For from Him and through Him and for Him are all things. To Him be the glory forever!  
Amen”-Romans 11:36.

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personal and professional growth. Their willingness to share their knowledge and experience has been a cornerstone of my development as a scholar.

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## LIST OF ABBREVIATIONS

AHRQ – Agency for Healthcare Research and Quality

AIDS – Acquired Immunodeficiency Syndrome

BARHII – Bay Area Regional Health Inequalities Initiative

CBT – Cognitive-Behavioral Therapy

COVID-19 – Coronavirus Disease 2019

HIV – Human Immunodeficiency Virus

HCV – Hepatitis C Virus

IRB – Institutional Review Board

MAT – Medication-Assisted Treatment

MET – Motivational Enhancement Therapy

POMI – Prescription Opioid Misuse Index

US – United States

## CHAPTER ONE: INTRODUCTION

### Overview

For the last two and a half decades, there has been an increase in opioid misuse in the United States, leading to a public health crisis. The problem emanated from recommendations by pharmaceuticals that the drug OxyContin could be used by patients experiencing pain, leading to many deaths nationwide (Zibbell et al., 2023). A second wave of deaths stemmed from the expansion of the heroin market (Bolshakova et al., 2019). The market had attracted people who were already addicted to drugs. In recent years, a third wave of American deaths has occurred from the increased use of synthetic opioids such as fentanyl. Apart from addiction and fatalities, it has been noted opioids have led to problems such as mental health issues and nausea (Manchikanti et al., 2018).

For many families in the United States, engagement in opioid abuse tends to be passed from generation to generation. Opioids are not the only household drugs abused by people (McElrath, 2018). It is revealed that individuals in low-income communities tend to engage in polysubstance use and are observed to engage in drug abuse to survive. Understanding the behaviors of drug abusers is known to be challenging, yet necessary. Social determinants of health are non-medical factors that influence health and should not be ignored when evaluating opioid usage in communities or households (McGregor, 2018).

It is also noted despite improvements in the control of social vices, some negative stigma, stereotyping, and representations exist among African-American and Hispanic-American populations who engage in substance abuse. The negative images of these populations increase their chances of being mistreated, discriminated against, and even punished. It is noted some

African American community leaders advocate for reducing the use of controversial terms like “opioid epidemic”, as they opine that these terms may prompt negative attitudes towards users in the community (Telusca et al., 2022; Lyden & Binswanger, 2019). Residents in such communities are unwilling to seek help, as they fear their information may be used to initiate incarceration procedures. This increases the risk of the residents using alternative means, such as buying over-the-counter drugs. Measures for controlling opioids have been initiated in some communities; however, there are minimal opportunities for treatment, compassion, and understanding when implementing such measures to control the crisis. It has been observed that improving public awareness of factors such as physical and mental health, addiction, trauma, and other issues surrounding opioid use may reduce stereotypes and other negative perceptions of opioid users (McGregor, 2018). For instance, a podcast miniseries known as “*Let’s Talk Stigma*” was used to provide patients with information on aspects such as the historical context of stigma, treatment of the issue, harm reduction, and naloxone use. Over time, approximately 59% of the patients partaking in the podcast were able to reduce their stereotypes and negative perceptions (Kissell et al., 2022).

This chapter provides the overall purpose of the study. It shows the need for examining the impact of opioids on the study population and strategies for controlling the issue. In the background section, the researcher provides reasons why the opioid crisis continues to affect victims. This gives the readers sufficient knowledge of the start and development of the problem in the United States. The situation to self provides the context in which the researcher engages in the study and reveals suitable measures that can be applied to the study. The statement of the problem introduces the reader to the role of knowledge on opioid usage and shows the importance of the problem being studied.



## Background

Only about 10% of opioid abusers seek medical attention due to strong distrust toward the medical community (Palombi et al., 2018). These perceptions are predominantly among the African American and Hispanic ethnicities and emanate from their negative experiences with harsh policies (Shipton et al., 2018). It was observed the Anti-Drug Abuse Act of 1986 led to severe sentencing of drug users from the Hispanic and African communities, impacting them in several ways. About 80% of the drug users were African American, and this led to increased rates of nonviolent African American drug offenders, thus, making the population negatively perceive the American justice system (Rosenberg et al., 2017). Engagement in the study is essential as it helps remove the negative perceptions regarding the need to seek interventions to control the problem. This is achieved by providing clear information about suitable interventions for controlling the use of opioids (Lyden & Binswanger, 2019). It has also been observed that there are faulty explanations for opioid addiction. Like other forms of addiction, opioid use is not well understood in society. For instance, few people view addiction as a disease, whereas many see drug addiction as a weakness (McElrath, 2018). This warrants a discussion for recognizing drug addiction as a health challenge, rather than a moral challenge, and increasing the knowledge level of current opioid addicts and potential users to reduce the trend of opioid abuse in the society (McGregor, 2018).

There is a lack of cultural or community-responsive measures to identify the strengths and resources of target communities. Such measures would provide respectful control of opioid use. Developing perspectives that align with all the patients' needs have been complex (Kabir & Zaidi, 2022). This creates a problem in the management of opioids, as patients with the condition are likely to experience implicit biases, which are attitudes that negatively influence the judgment and

behaviors of affected individuals in a way that they may not be consciously aware of. These biases can affect how they interact with people from other ethnic backgrounds. For example, African Americans and Latinos may have limited interactions with Caucasian practitioners (Palombi et al., 2018). A shortage of practitioners who understand the cultural differences among various opioid users makes the treatment of substance abuse cases more difficult. This portrayal reveals engagement in the study helps in building skills for controlling the opioid epidemic (Stoicea et al., 2019; Bernard et al., 2018). The researcher observed having relevant knowledge and skills will boost the competence of healthcare workers to improve opioid management in different regions of the country (Gomes et al., 2018).

Regarding the handling of the problem, understanding opioid symptoms is helpful for practitioners. Patients using opioids are characterized by confusion, drowsiness, and constipation. The drugs may also cause slowed breathing, a significant factor in overdose deaths (Chen et al., 2019). Few empirical studies have directly examined the association between opioid usage, human health, and strategies for controlling the problem. For instance, Rao et al. (2021) investigated the effectiveness of the developed policies in managing the opioid crisis in the United States. The researchers evaluated the important effect of using naloxone, and the outcomes showed that an increase of naloxone by 30% led to a reduction of opioid-related deaths by 25%, hence, indicating that the intervention is effective.

Contrarily, Stringfellow et al. (2022)'s research showed different outcomes. The researcher conducted a study to determine how to reduce opioid use disorder and overdose deaths in the United States. The researchers focused on strategies such as the distribution of naloxone to opioid users, reduction of fentanyl usage, and recovery support for individuals in remission. These strategies have a minor impact on reducing opioid addiction prevalence as they were effective for

a short period. There was little increase in knowledge and skills for controlling addiction. It was observed they did not reduce the risk of opioid overdose involving drugs such as fentanyl, there was little support for recovering patients, and there was a low distribution of naloxone. It can be deduced that there are varying perspectives on the efficiency of strategies for controlling opioids. Such results may confuse healthcare practitioners, as they may not clearly understand the impact of opioids on the human body (McElrath, 2018). This creates the need to engage in this study to provide comprehensive findings on the effects of the problem. For example, it emphasizes the need to study the impact of different interventions in handling drug use in the population (Jones et al., 2018).

The persistence of the opioid crisis shows society should make behavioral changes to handle the problem. Measures such as monitoring and drug laws applied during the crisis showed many healthcare facilities were unprepared to handle the crisis, and if opioid prescription controls are not implemented, more people in the future will be affected (Kharasch & Clark, 2020). According to Stringfellow et al. (2022), a suitable way of controlling opioid usage would entail preventing and controlling the problem before it escalates to uncontrollable levels (Volkow et al., 2019). Few studies have examined reliable interventions within the American setting. For example, Lee et al. (2021) only focused on state-policy interventions in the United States aimed at developing changes in how drugs are provided at the state level. The policies aimed at changing how prescriptive drugs are provided in the United States. In addition, the study by Gleber et al. (2020) focused on evaluating the trends in emergency physician opioid prescription practices at the federal level. The authors focus on the level of use of opioid prescription drugs and non-opioid medications. There are gaps in evaluating interventions in the federal setting (Compton et al.,

2019). The study will extend the existing body of knowledge by focusing on specific ethnic communities in the United States.

### **Situation to Self**

As a researcher, I desire to face the challenge of developing reliable solutions to problems affecting our society. I had concerns over the development of practical solutions to the opioid crisis. I believe that engagement in the study process will give me intellectual fulfillment and a sense of confidence towards handling the opioid crisis in Pennsylvania. I have learned that epistemology involves attaining awareness of certain forms of reality. It also enables researchers to understand what is known and how exactly it is known. I will apply the epistemological philosophy, as it will help me closely relate with the participants. This will enable me to attain quality data as it shows how people think, believe, and apply new information. The philosophy will enable me to explain how our minds relate to reality and how associations are either valid or invalid. I will also utilize the methodology philosophy. After obtaining research data, I will make use of an inductive approach in the analysis of the attained data, as it will enable me to work with many details before generalizing the findings. An advantage of the methodological philosophy is that it supports flexibility in data collection. This approach will guide me to finetune some of the open questions to align with the specific needs of the participants, and this will also support the stability of my relationship as a researcher with the participants (Cutler et al., 2022).

I will also apply a positivist paradigm in carrying out the study. Positivists have the notion that reality is relatively stable and can only be observed and described from an objective perspective. Moreover, they have the view that concepts or phenomena must be isolated while observations must be repeatable. I will apply this philosophy in the description and observation of

realities, as it will enable me to manipulate variables where appropriate, to link the elements of the study and attain quality outcomes (Cutler et al., 2022).

### **Problem Statement**

The opioid crisis is significant in the United States. Despite the first wave of opioid deaths experienced in the United States, legal and healthcare measures such as policies for controlling narcotic entrance into the country and application of naloxone did not prove to be very effective in handling the problem. This led to the occurrence of the second and the third waves of opioid-related deaths. So far, different types of opioids, such as synthetic and prescriptive drugs, have pervaded the American society (Volkow et al., 2019). Healthcare facilities have been flooded with health problems that result from opioid addiction, such as overdose, mental fog, and nausea. Currently, there is no clear understanding of how exactly certain drugs influence the body and lead to addiction (Chen et al., 2019). Financial, time, and human resources have been spent in trying to manage the opioid crisis, and if the issue is not controlled, it will significantly impact the country's economy by reducing the capability of many citizens to work effectively (Florence et al., 2021). It is shown that the problem affects economic groups differently, as people from low-income families are more directly affected due to healthcare disparities and inequities (Jones et al., 2018).

Moreover, opioid issues in Pennsylvania are not widely understood, as few studies specifically target participants from the area. Studies such as Rao et al. (2021) focused on opioid usage in North America in general. The study revealed strategies such as drug rescheduling, reduced prescribing, psychosocial treatment, and prescription monitoring programs would help the North American continent control the opioid crises in various countries. While the strategies are essential, they do not align with the specific needs of Pennsylvania. This creates the need for a

study that focuses on the population of Pennsylvania. The state has unique problems caused by opioid usage. For example, healthcare conditions such as Hepatitis C and HIV/AIDS have been associated with opioid usage in the state, as these health conditions can be spread via injections (Tsui et al., 2021). The use of drugs such as heroin led to the sharing of needles, resulting in HCV and HIV infections. Understanding the disease's prevalence would help improve health promotion activities such as advocacy for behavioral changes (Sumetsky et al., 2019). This can create a foundation for more studies in the area, hence improving the development of measures specific to the state. Future researchers may apply the approaches used in this study to examine different areas of opioid use. The approaches will help in reducing the prevalence of opioid misuse in the United States.

### **Purpose Statement**

This grounded theory study aims to describe the impact of opioids on African Americans and Hispanic adults between the ages of 18 to 40 at *Pathways to Recovery Counseling and Education Services* in Pennsylvania. It is revealed age, gender, and ethnicity of individuals may determine their engagement in drug misuse. Opioid misuse is a significant problem for people from different socioeconomic groups. At this stage in research, opioids will be generally defined as prescriptive and non-prescriptive drugs used in managing pain. The drugs are shown to have side effects, which need to be studied. The theories guiding this study is the Intersectionality Theory and BARHII framework which show the impact of social determinants of health in opioid use in African Americans and Hispanic adults, as they are affected by social inequalities (Wilson et al., 2019).

### **Significance of the Study**

The study is critical because it aims to understand how opioids affect a person's health. It will provide knowledge on controlling the physical and mental health problems associated with opioid misuse. The researcher also focuses on examining the impact of opioids on other aspects of a person's life, such as social and economic issues. These factors determine the ability of people to make healthy choices. They help to explain the health status of an individual or a community (Palombi et al., 2018). This will highlight how the problem affects society from a socioeconomic standpoint. Moreover, it tries to reveal reliable measures for controlling opioid usage in the United States. This aspect will reveal the roles of different interventions in controlling the impact of drugs (Volkow et al., 2019).

The researcher believes the study findings will benefit society, given that the opioid crisis has significantly impacted people's lives. The problem has led to increased expenditure of financial resources to treat opioid patients. It has also increased social vices such as thefts, as addicts try to get money to meet their addiction needs. The proposed study will enable people from low-income families to live addiction-free lives, improving their health status. It will improve their awareness level, increasing their access to healthcare services for controlling opioid addiction (Compton et al., 2019). It will also enable the government to spend fewer financial resources on handling opioid addiction in the country, as they will apply cheaper methods like monitoring interventions for controlling the problem. Moreover, it will be easier for facilities to handle other healthcare conditions, as fewer people with opioid-related health conditions will need health services. For example, the study by Huang et al. (2019) shows preventive measures such as increased awareness can reduce about 38% of opioid cases.

The proposed study will help uncover essential areas such as addiction management in healthcare practice. It will result in developing policies, monitoring, and treatment interventions for controlling opioid misuse. Knowledge of narcotics management will help the researcher develop creative solutions for problems that emanate from narcotics usage in patients (Palombi et al., 2018). The proposed research also aims to minimize some of the study's gaps. There is a lack of research on the factors such as family history in opioid use and poverty that lead to opioid addiction in the context of African Americans and Latinos.

Moreover, there is a lack of research on applying governmental and healthcare interventions for collaboratively managing opioids. It is essential to understand aspects such as government policies and medical strategies offered by practitioners (Volkow et al., 2019). The researcher also observes that there lacks a focus on the impact and management of opioids in Pennsylvania. The study will fill these gaps by ensuring the research questions align with the issues other researchers are yet to cover. This will ensure the researcher contributes significantly to narcotics management. The researcher believes understanding the practitioners' role is essential when analyzing the efficiency of different interventions of opioid management (Leedy & Ormrod, 2019).

### **Research Questions**

The study will be conducted at *Pathway to Recovery Counseling and Education Services* in Hazleton, Pennsylvania. The subject population will include adult African American and Hispanic male patients aged 18-40 and healthcare practitioners in Hazleton. The following central research question and sub-questions will guide the study:



**Central research question:** Explore the impact of opioid use, addiction, and preventive practices on the health and wellness of adult African American and Hispanic individuals.

***Sub-Question 1: How does addiction affect health and wellness among African American and Hispanic adult users?***

This question aims to understand the impact of addiction on the study population. Addiction is a significant theme in opioid misuse across different populations. It is essential to examine its influence on patients. The problem leads to a financial decrease associated with increased drug purchasing. It also has a profound effect on the mental and physical health of individuals. Addiction leads to reduced quality of life as a person cannot effectively engage in their daily responsibilities. People with addiction will likely develop healthcare problems associated with long-term drug use, such as heart disease (Kreek et al., 2019).

***Sub-Question 2: How do age, gender, and ethnicity influence opioid use and addiction among adult African American and Hispanic male users?***

Factors that affect opioid usage in society are essential. Different populations may experience problems such as sexual needs that may be influenced by age, gender, and ethnicity as significant factors that lead to their misuse of opioids. In terms of age, it is revealed there are differences in how young people utilize drugs compared to older individuals. Regarding gender, males have higher tendencies to utilize opioids than their female counterparts. On the other hand, ethnicity determines opioid usage, as people from minority groups are more likely to use the drugs than their Caucasian counterparts. The researcher aims to understand the factors specific to Hispanics and African Americans (Bedene et al., 2019).

*Sub-Question 3: How do participants perceive the efficiency of opioid preventive practices on adult African American and Hispanic users?*

Measures used in managing opioid usage are also an essential theme in the study topic. It has been observed that public health policy interventions such as initiation of drug monitoring programs, state drug laws, and drug authorizations are used for controlling opioid usage are applied by healthcare agencies as well as the government. These policies focus on controlling the supply and demand of opioids. For example, enhanced access to opioid treatment is required to reduce demands driven by opioid users. Understanding the importance of these measures in the study setting is essential. The researcher reveals knowledge of the practitioners' preventive practices will be vital to controlling the crisis effectively, hence, is important to obtain qualitative information from the study based on the nature of the question. This approach comprehensively explains preventive interventions (Kreek et al., 2019).

### **Definition of Terms**

**Opioids:** They refer to a group of drugs that are used for reducing pain. Common types include oxycodone, morphine, and methadone. The drugs can be prescriptive or used over-the-counter. They can also be found in synthetic forms (McGregor, 2018).

**Addiction:** A neuropsychological dysfunction that entails a persistent or intense urge to repeat or engage in certain behaviors. Drug addiction refers to a dysfunction that affects an individual's brain, leading to the inability to control their use of drugs (Wang et al., 2019).

**Drug impact:** This refers to the effect of drugs on an individual, a health facility, or the healthcare system in general. They result from the usage of opioid drugs, and the effects can be short-term or long-term (Rhodes et al., 2019).

**Drug overdose:** It refers to excessive consumption of a drug. This can result in a health emergency due to high drug levels in the body (Wang et al., 2019).

**Overcoming:** This term implies finding a solution to a problem. In the case of drug addiction, it means overcoming the persistent urge to consume drugs, and the process of gradually receding from the problems associated with drug misuse (Rhodes et al., 2019).

**Intervention:** This is an action that is implemented to control or improve an issue. In the case of opioid use, interventions refer to methods or strategies that are applied to control the impact of opioids in society (Wen et al., 2019).

### Summary

Opioid usage and addiction are shown to be significant problems in the United States. For the last two and a half decades, there has been an increase in the number of opioid abuses in the United States, leading to a public health crisis. The section reveals three waves of the opioid crisis in the country, each with a different form of opioid (Bolshakova et al., 2019). Only about 10% of opioid abusers seek medical attention due to strong distrust toward the medical community (Palombi et al., 2018). These perceptions are predominantly among the African American and Hispanic ethnicities, and they emanate from the groups past experiences (Shipton et al., 2018). There is a lack of culturally or community-responsive measures to identify the target community's strengths and resources. For example, educational policies do not acknowledge cultural

differences, which could help control ethical bias when handling the opioid crisis. Also, developing perspectives that align with all the patients' needs has been complex (Kabir & Zaidi, 2022).

Regarding the handling of the problem, understanding opioid symptoms is helpful for practitioners. Patients using opioids are characterized by confusion, drowsiness, and constipation (Chen et al., 2019). The persistence of the opioid crisis emphasizes the need for practitioners to make behavioral changes, such as reducing the use of opioids in postoperative patient care to handle the problem (Kharasch & Clark, 2020). The researcher desires to face the challenge of developing reliable solutions, such as the distribution of naloxone to communities, hence, helping to curb opioid-related issues that affect our society. Many resources are used in the management of opioid addiction. If the problem is not controlled, it will significantly impact the country's economy by reducing the capability of many citizens to work effectively (Florence et al., 2021).

The purpose of the grounded theory study was to describe the impact of opioids on African Americans and Hispanic adults between the ages of 18 to 40 at *Pathway to Recovery Counseling and Education Services*. The study was critical because it aimed to understand how opioids affect a person's health. The study provided knowledge on ways to control physical and mental health problems associated with opioid misuse (Palombi et al., 2018).

## CHAPTER TWO: LITERATURE REVIEW

### Overview

This chapter offers a comprehensive overview of the scholarly work that has been previously conducted on the topic of opioid addiction. It serves to lay out the various viewpoints that have been explored in the field, providing a rich context for the current study. The goal of the researcher is to pinpoint where previous research falls short, identifying areas that have not been thoroughly examined. By doing so, the researcher sets the stage for the necessity of this new inquiry. To achieve this, the chapter is divided into two primary sections: the theoretical framework and the review of related literature.

Within the theoretical framework, the researcher delineates the conceptual models that are essential for understanding the complexities of opioid addiction and the range of approaches that can be employed to address it. This includes an in-depth discussion of the Intersectionality Framework and the BARHII (Bay Area Regional Health Inequities Initiative) Model, which provide valuable insights into the multifaceted nature of addiction and public health responses. The section on related literature delves into the pertinent themes and sub-themes that inform the research objective. The narrative begins with a historical examination of how the opioid crisis has evolved over time. It then investigates the connection between ethnicity and opioid use, highlighting the various cultural and socio-economic factors at play. Furthermore, the literature on interventions previously used to mitigate opioid misuse is scrutinized, giving the reader a clear understanding of what strategies have been attempted and their outcomes.

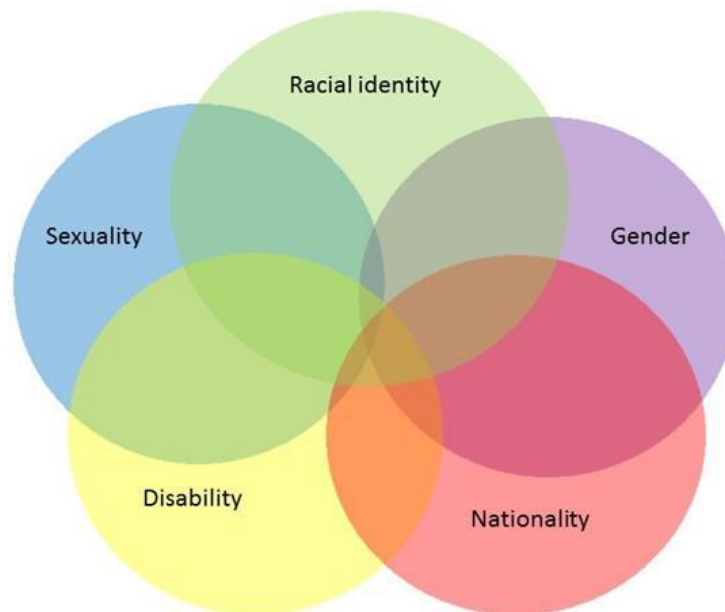
By the end of this chapter, readers will have a well-rounded grasp of the existing body of research on opioid addiction, the gaps that remain, and the significance of the current study in bridging those gaps.

### **Theoretical Framework**

The researcher employs two theoretical frameworks to integrate various themes related to the study's subject matter. The first framework, intersectionality, is used to demonstrate how different factors are interconnected and how they collectively influence outcomes, as discussed by Persmark et al. (2020). The second framework, the Bay Area Regional Health Inequalities Initiative (BARHII), is utilized specifically to articulate the issue of health disparities within the realm of opioid use, as identified by the Bay Area Regional Health Inequalities Initiative in 2010.

#### **Intersectionality Framework**

**Figure 2.1**



Persmark, A. (2020) *Intersectionality: challenging dominant narratives and revealing heterogenetics*.

<https://doi.org/10.1080/09581596.2019.1626002>

Kimberly Crenshaw developed the intersectionality framework model in the late 1980s. It was designed to reveal how different issues, such as gender, sexual orientation, and ethnicity shape a person's privilege or discrimination. Crenshaw focused on three elements of the framework: political, structural, and representational forms. Regarding political intersectionality, it can be viewed that people's ethnicity differentiates their political experiences from other individuals. Minority women tend to have more challenges than minority men due to gender biases, which are thought to determine women's roles in the society. For example, it was found women were paid less income than men for the same job (Toczek et al., 2021). Childrearing also affects women, which limits their ability to make the same income as men. It leads to problems such as domestic violence if the perceived women's roles are not fulfilled. This aspect highlights the need to evaluate discrimination that differentiates the population groups (Persmark et al., 2020). Structural intersectionality reveals cultural differences lead to variations in how people of the same race may experience social problems such as opioid addiction. Representational intersectionality focuses on developing an image that can support people experiencing challenges. It criticizes racism and sexual discrimination against women of color. It also shows the importance of understanding the role of healthcare promotion. It can be viewed that people experiencing opioid addiction need to be represented by the media to create awareness about the burden of opioid addiction in society (Wilson et al., 2019).

The model can be applied to explain the issues that surround the opioid crisis in the United States. For instance, it helps to reveal that ethnicity affects a patient's risk of drug addiction. This can be seen in the depiction that minority communities are more likely to experience an opioid crisis, and this is because such groups may often experience challenges in accessing quality healthcare than the majority groups (Persmark et al., 2020). According to the Agency for

Healthcare Research and Quality (AHRQ), in 32% of access measures, African Americans had lower rates than Caucasians. In 63% of access measures, Hispanics had lower rates than Caucasians.

Moreover, the view that people from lower socioeconomic backgrounds likely have opioid addiction reveals the problem results from systemic inequalities. The Agency for Healthcare Research and Quality (AHRQ) also indicates that poverty-stricken people do not have as much access to healthcare as wealthy people in 47% of access measures (AHRQ, 2023). Research shows that incorporating the model to evaluate the foundational causes of drug overdoses is essential to observing societal power imbalances (Wilson et al., 2019).

### **The BARHII Framework**

The BARHII Framework model was developed to demonstrate the relationship between social inequalities and health status. It was created to examine the measures for addressing social inequities that are yet to be included in the scope of public health management. Based on the framework, there are six levels that enhance health inequalities, with the first step entailing social inequalities as a significant foundation of health problems. In this phase, race and ethnicity are major determinants of health. This feature can be used to explain why opioid abuse affects African Americans and Latinos more than Caucasians. This is because it shows the challenges, such as poor housing and low-income levels, faced by the two ethnic groups in the healthcare system (Bay Area Regional Health Inequalities Initiative, 2010).

Moreover, it is shown that gender is a significant determinant. There are differences in how men and women perceive pain. Women are more likely to seek medical attention for pain than men, making men more likely to engage in opioid abuse than females. This leads to differences in



how both genders are affected by opioid misuse. Immigration status is also another concern of this model. It is shown people who stay illegally in the country tend to abuse opioids as they prefer to buy over-the-counter drugs rather than prescriptive drugs. The behavior emanates from the fear of their identities being used for deportation. It can be illustrated by the qualitative interviews showing Latino Americans in Phoenix have a negative perception of the police as the population is perceived to engage in crime and drug abuse. It limits their capabilities of buying prescription drugs as their identity can be recognized, leading to deportation (Menvar & Bejarano, 2004).

The second level of health determinants entails institutional inequalities such as social services and places of employment. Low-income families are likely to experience challenges in attaining quality education due to insufficient funds to cater for the costs. The resulting limited access to education also reduces their level of awareness of opioid misuse. This means they are more likely to overlook the negative impacts of opioids than individuals of higher education. From another aspect, media narratives about opioids have also contributed to the occurrence of the opioid crisis as they promoted the mass usage of the drugs after they were postulated to be adequate for patients (Bay Area Regional Health Inequalities Initiative, 2010). In the third level, living conditions affect patients' experiences of opioid addiction. From this description, it has been observed that people living in places with unfavorable economic environments tend to suffer high stress levels (Carroll et al., 2020). Therefore, they are more likely to engage in drug addiction to reduce their stress-related psychological challenges.

Additionally, lack of access to quality healthcare is a significant issue in the misuse of opioids in various communities. It leads to increased chronic pain as healthcare conditions deteriorate in patients. This results in the need to utilize opioids and increases the likelihood of people to procure over-the-counter drugs, which may not be managed effectively (Thomas &

Prentice, 2008). The researcher views the frameworks are vital and will be applied in the study the way they are.

## **Related Literature**

### **Development of Opioid Crisis**

Drug addiction cases have long been experienced even before the occurrence of the opioid crisis, implying that the United States has a long history of drug abuse. However, the occurrence of the opioid crisis has worsened the situation. The first wave of the opioid crisis is shown to have begun in the mid-1990s and led to an increase in overdose deaths. By 1999, it was noted both natural and semi-synthetic narcotics had increased (Shipton et al., 2018). By 2010, public health agencies were yet to fully control opioid abuse. At this time, the second wave struck and was associated with an increase in the use of heroin. This included addicts who had already been affected by other opioids. While there were measures to curb the problem, heroin has continued to be abused among American residents (Jones et al., 2018).

Research also shows the third wave occurred around 2013 and was associated with the occurrence of synthetic opioids, such as fentanyl. It has been noted fentanyl usage has increased, along with death rates, among low-income families, in recent years. About 70,000 deaths caused by fentanyl overdose were reported in 2021. It has also been observed that the number of overdose deaths due to synthetic drugs, other than methadone, has increased by over 56% between 2019 and 2020 (Jones et al., 2018). It can be argued that if suitable measures are not properly implemented, there will be an increase in the opioid crisis in the country. Also, it has been reported that the introduction of synthetic opioids has increased death rates by about 7.5% (Shover et al., 2020). This means when developing strategies for controlling opioid usage, the government needs to

consider the impact of synthetic opioids on society. Therefore, measures initiated specifically to prevent synthetic opioids should also be implemented (Shipton et al., 2018).

According to Bolshakova et al. (2019), opioid misuse is highest in the United States, with about 11.8 million Americans affected by the issue. The opioid problem has been associated with demographic, psychosocial, and environmental factors. This revelation depicts that different issues cause opioid misuse. Therefore, developing strategies to control the problem is warranted. When looking at demographics, the problem is more common among African Americans and Latinos, as their resident communities are affected by poor living conditions, low income, and low access to quality healthcare (Alpert et al., 2022). This emphasizes the need for strategies that specifically address these communities to be developed to control the menace in these communities.

### **Opioid Use and Gender**

Research shows differences in how women and men are affected by opioid use and addiction. According to Marsh et al. (2018), men have higher prevalence rates of heroin and nonmedical prescription opioid use than women. This occurs due to differences in childcare responsibilities and addiction stigma. Despite this more substantial prevalence, Silver & Hur (2020) observed opioid research has mainly centered around expectant mothers, patients, or caregivers, with little attention directed toward usage in men. This accounts for the 58% increase in opioid-related deaths among men. Hoopsick et al. (2021) further noted men have higher opioid-related deaths than women and use more varieties of opioids than women. It was reported 17.7% of opioid-related deaths occurred among African American males. Only 5.4% of the deaths occurred among African American females. In addition, 8.75% of opioid-related deaths occurred

among Caucasian males. Only 7.9% of the deaths occurred among Caucasian females. Due to this gap in the literature, research concerning opioid use and misuse among men is warranted.

The study by Huhn et al. (2019) also supports the claim for more opioid research centered on the male population. Women are more likely to report healthcare conditions such as mental health challenges after using opioids and respond better to maintaining opioid prescriptions. However, lower reports in men are associated with higher tolerance levels as they believe they can handle mental health issues independently. Moreover, men are less likely to respond to interventions well because they are affected by more cognitive problems than women. The issue majorly emanates from their role as providers in families. Bilsker et al. (2018) revealed mental health issues affecting men in Canada were initiated by their gender roles, and 80% of suicides in the country involve men. When they cannot sustain their family's social and economic well-being, men tend to be affected by different mental health problems. The results exemplify that although men may experience mental health problems, they are less likely to go to healthcare facilities for treatment (Bilsker et al., 2018).

### **Opioid Use and Ethnicity**

Ethnicity has a significant impact on the use of opioids among African Americans. There are differences in how people from different ethnic groups engage in opioid misuse. Hoopsick et al. (2021) revealed African Americans and Latinos have higher rates of mortality associated with opioids than Caucasians due to differences in their access to quality care. Based on outcomes, it can be suggested systematic problems such as racism in healthcare facilities affect different life aspects of minority groups and play a huge role in the lives of African Americans and Latinos. Schuler et al. (2021) also tried to show the ethnic differences in the use of heroin and other opioids.

It was depicted Caucasians had higher rates of using opioids than African Americans, Hispanics, and Asians. African Americans were 29% less likely to use analgesics than Caucasians. This is because African Americans have lower access to prescribed drugs (Schuler et al., 2021).

Moreover, Latinos were 22% less likely to use opioids than their Caucasian counterparts. Caucasians were observed to have higher levels of access to healthcare services, hence, making it easier for them to access prescription drugs. The study outcomes showed no clear depiction of the rate of opioid usage among different groups. Thus, factors other than ethnicity play a significant role in initiating opioid use behaviors. Therefore, it can be postulated the control of drug misuse among different populations should focus on a broader area of factors such as access to healthcare (Hochheimer & Unick, 2022).

Regarding opioid use, it can be viewed that ethnicity has not been covered effectively. Studies such as Pouget et al. (2018) show differences in perceptions about opioid use among ethnic groups in the United States. In a nationwide study to evaluate ethnic prevalence in opioid treatment programs, it was initially observed that Latino (39%) and African American (44%) rates were higher than their Caucasian counterparts (33%). However, heroin use increased among Caucasians by 50% and decreased among Hispanics and Africans by 15%. Based on these outcomes, it can be viewed there is a challenge in attaining a clear depiction of drug usage in these communities. In addition, Essien et al. (2020) depicted that following non-fatal opioid overdose experiences, there are no differences in opioid prescription use among various ethnic groups, making ethnicity an insignificant factor. This creates the need to evaluate the influence of race in the utilization of opioids among the study population.

## Opioid Use and Age

Age is also shown to be a significant factor in the misuse and addiction of opioids. Tucker et al. (2020) evaluated the prevalence of opioids in adolescents. It was observed that perceived peer approval, older sibling opioid usage, and expectancies tend to determine the behaviors of adolescents. It was revealed that the history of misuse of other substances was significant in adolescents. The researchers showed that children with a history of opioid use between age one and age seven, on average, started to misuse opioids in their adolescents. Thus, social factors such as peer pressure and academic problems associated with adolescents tend to influence increases in their prevalence of using opioids. Reboussin et al. (2020)'s study on the factors related to opioid usage in adulthood revealed that exposure to cannabis during adolescents increased the risk of engaging in opioid misuse activities by 44.8%. This implies that opioid addiction is related to the consumption of other drugs. However, it can be noted that the combination of cannabis and the age of the patients leads to increased risk.

The rate of involvement of young people in opioid misuse shows that age is a significant factor. Robinson & Wilson (2020) reported that many young adults tend to engage in the injection of opioids such as heroin. Results showed that fatal opioid overdoses are a significant reason for the increased prevalence of mortality among youth. It was noted that only 2% of young people between the age of 13 and 22 received medication after experiencing an opioid overdose. This negligence has led to an increase in the number of young people who are dying after an opioid overdose. Therefore, providing overdose education is a suitable method for controlling opioid-related mortality among the population. While intervention is ideal for controlling deaths, it does not provide a foundation for preventing addiction. Education on overdose addiction focuses on the

problem's impact rather than its development. Education on the prevention of opioid misuse could be more effective.

On the other hand, Han et al. (2019) reveals that abuse of prescriptive opioids is prevalent in older adults. It was revealed about 36% of the population had utilized prescription drugs within a year of carrying out the study. Out of the users, 6.6% were reported to engage in opioid misuse. Contrarily, only 5% of 12th-grade teenagers were observed to misuse prescription drugs. This may mean more senior adults are affected by non-prescription opioids than younger adults. Therefore, more effort should be directed to screening older adults for misuse of opioids and prescription drugs.

### **Impact on Mental Health**

Mental health is shown to be a significant theme in opioid misuse. In the study by Moazen-Zadeh et al. (2021), it was reported the use of certain opioids such as hydromorphone may improve mental health conditions by reducing pain and enhancing a sense of well-being. Furthermore, the combination of hydromorphone, buprenorphine, and methadone was more efficient than using one type of drug. A variety of drugs reduced the time needed for patients to manage their pain. This observation depicts opioids are essential if different drugs are administered to a patient, as the combination may aid mental health recovery.

On the other hand, it was noted psychosocial services are not needed when hydromorphone, buprenorphine, and methadone are used. It would have been helpful if the study focused on the application of opioids to other healthcare conditions. This would have revealed the unintended effects of opioids on a patient's mental health (Rogers et al., 2019). This study will fill the gap by examining the misuse of opioids in patients experiencing problems other than mental health issues.

Suicide is an essential aspect of mental health, as reported in patients with opioid use. Czeisler et al. (2020) focused on determining the nexus between mental health, substance use, and suicidal ideation during COVID-19. The researchers observed that many patients with substance abuse disorders had mental health problems with increased symptoms among young adolescents. This issue increased the population's risk of suicidal ideations. About 30% of the surveyed population was observed to have suicidal ideations within one month (Czeisler et al., 2020). This current study will examine how opioid misuse leads to mental health severity through aspects such as suicidal ideations.

In addition, depression and anxiety are observed to be common mental health problems triggered by opioid usage. For instance, mood swings occur with drug addiction if individuals undergo a lapse in drug use. This can impair a patient's cognition, thus making them engage in unlawful activities (Rogers et al., 2019). In communities with a high level of opioid addiction, there is an increased risk of drug-related crimes. It is noted about 1.6 million Americans are sent to prison each year due to crimes. These acts occur because opioid users may only focus on meeting their urges without thinking of the consequences of their actions. Therefore, increased ease of opioid access will continue to increase the level of mental health problems in American communities. Many people with little access to prescribed opioids can access the drugs, making it easier to meet their urges (Rogers et al., 2021).

### **Impact on Physical Health**

The research topic reveals a relationship between opioid usage and physical health issues. In older adults, opioids increase the risk of fractures and falls. This problem is associated with the metabolic changes accompanying aging. Older adults are also observed to experience excessive



sedation and respiratory depression. Impairment in vision is also associated with opioid use among the elderly. Up to 80% of elderly patients are affected by opioid use symptoms (Potru & Tang, 2021). Moreover, research shows the issue may lead to drug tolerance. Frequent use of a drug leads to a progressive diminishing of the body's response to its use. It contributes to changes in the allostatic set point, thus resulting in drug dependence (Daoust et al., 2018). This means when a patient uses medications for a variety of conditions, there is likelihood they may be ineffective. The benefits of the drugs may fade, thus, increasing the need for higher dosages to treat conditions. This problem increases the risk of a drug overdose to control a patient's health issue (Gazelka et al., 2020). It helps depict that opioids affect a patient's physical health through tolerance, respiratory depression, falls, and drug dependence.

Drug overdose poses a serious risk to physical health. Research shows opioid addicts have a high likelihood of experiencing a drug overdose. It entails the consumption of a dose more elevated than the recommended level. The act can cause slowed heart and breathing rates and leads to death in patients. Research also reveals that long-term use of these drugs may lead to constipation. If not treated in time, constipation may lead to hemorrhoids and bowel incontinence, which may be fatal over time (Gazelka et al., 2020). It shows opioid use may lead to health complexities as it triggers different physical conditions. The issue aligns with the study topic as it helps to show the severity of physical problems that emanate from the misuse of opioids.

Physical problems are depicted to be more significant in patients with chronic conditions. Zylla et al. (2018)'s study postulated that cancer patients experience much pain, and this increases their need to utilize opioids during care. The study also showed the utilization of opioids in cancer patients leads to shorter survival. Out of 1,386 patients, 762 had a survival chance of fewer than 5.5 years. It may mean although opioids tend to control pain associated with cancer, they also

affect the individual's physical health, making them succumb to their conditions more quickly. However, this can be contradicted by the revelation of the benefits of opioids in patients. Research shows opioids lead to improved quality of life in some patients. Patients under critical care experience enhanced quality of life as they can move around. The drugs alleviate physical symptoms such as breathlessness which may hinder a person from engaging in everyday activities effectively. Control of these symptoms ensures that patients are relieved of their suffering (Zylla et al., 2018; Wood et al., 2019). They can also get enough sleep as they experience reduced pain after taking the medications. It means they can have stable physical health to enable them to participate in daily activities (Montgomery, 2022), and the outcomes show that opioids may also have a positive impact on users in terms of physical health. This current study will limit the differences in perceptions regarding the effects of opioids on physical health by evaluating the physical health of opioid users.

### **Economic Burden**

The researcher observed a person's economic or financial status may be affected by opioid use. Florence et al. (2021) focused on understanding the economic impact of opioids on society. The researcher observed that pain affects many people in the community, and patients have different pain levels. The study revealed opioid analgesics mainly control acute and chronic pain, and in 2016 alone, about 60 million Americans had a prescription for at least one opioid analgesic (Florence et al., 2021). It was also shown that the increased use of drugs affects individuals, families, and the society at large (Hagemeier, 2018). The addicts and their families experienced financial strains as their income was frequently channeled to buying drugs. Addicts also reduced their daily engagement in productive activities, thus affecting societal outcomes (Florence et al., 2021). In essence, there is an association between opioid use and the economic position of a person.

Research indicates patients who have had an experience with an overdose of narcotics have accounted for about \$2 billion in annual healthcare costs. This depicts that opioid overdose also affects healthcare facilities as they tend to increase patient treatment spending (Thorpe et al., 2018). It reduces the capabilities of the facility to carry out other healthcare activities. For instance, an increase in drug overdoses makes it hard for practitioners to handle other health conditions such as the management of diabetes, and as a result, this reduces the regular attendance of non-opioid patients to such healthcare centers. In addition, the opioid addiction crisis contributes to workforce shortage, as affected individuals are likely to become less efficient in the workplace, thus making it difficult to find and keep qualified workers, and further reduces profitability. For instance, a certain study reported that opioid addiction caused workforce participation to drop by 20% among men and 25% for women (Fuhrmann-Berger, 2018). The outcome aligns with the current study as it shows that opioid use increases the costs of healthcare provision.

Opioid addiction is observed to reduce the capabilities of people to engage in their daily lives effectively. Patients who experience the problem are less likely to engage in their work, limiting their income sources (Thorpe et al., 2018). Ultimately, their families are affected as they may face challenges meeting their daily needs. In addition, dependence on an individual on drugs leads to increased expenditure to meet the patient's addiction needs, and this also adversely affects the individual's financial status. Research also reveals that \$14.8 billion is utilized in criminal justice issues associated with opioid addiction (Fuhrmann-Berger, 2018).

### **Social Impact**

Opioid usage influences society in a variety of ways. Jalali et al. (2020)'s framework shows that engagement in opioid abuse affects users' utilization of alcohol. This leads to increased

domestic violence as users may have reduced capability to solve social problems at home, which leads to divorce and challenges in raising children. Additionally, some people use any surplus income to buy substances, resulting in homelessness and a reduced quality of life. People with substance abuse disorders are also observed to have challenges in interacting with others. For instance, they are unable to keep friends. They are also easily irritated by those around them. They may show elements of mood swings and cognitive difficulties. This can lead to a reduced capability of diagnosing their problems in time (McLaughlin et al., 2021).

Opioid usage is also shown to be associated with death. Bernard et al. (2020) showed that between 1999 and 2016, about 600,000 people died due to overdoses in the country. Most of the deaths were caused by prescriptive drugs and led to the devastation of loved ones, especially in families with single parents. The issue would increase the psychological problems in society, making communities with many opioid cases of abuse dysfunctional. Chen et al. (2022)'s study showed there is an appositive relationship between opioid usage and criminal activities. The researchers observed a steady increase in the levels of opioid use in the United States. This increased the rate of crimes by about three times. It was shown that initial crime rates were associated with prescription opioid-related occurrences. The findings reveal the type of opioid significantly determines the social impact of opioids. The study also shows illegal opioids have more social impact than prescription drugs as they are not regulated. The proposed study will evaluate the impact of different types of opioids on the severity of social problems in the United States.

## **Practices**

### **Pharmacological Practices**

A common strategy in the management of opioid addiction is the enhancement of naloxone distribution. Naloxone is observed to be a non-addictive drug essential in reversing the impacts of opioid overdose in the body. Public health agencies are known to train and equip people with an increased risk of experiencing an opioid overdose with naloxone kits (Dunne, 2018). Despite the positive impacts of the kits, they induce an acute withdrawal syndrome in patients. For example, patients may sometimes experience severe, fatal vomiting, and the effect of naloxone on the body may wear off prematurely. This may reduce the efficiency of the drug in controlling opioid overdose (Britch & Walsh, 2022). It can be opined that using naloxone kits focuses on controlling overdose rather than preventing the problem. This may mean it is ineffective in controlling the opioid crisis as it does not prevent the use of opioids in the population. Therefore, it cannot be declared as an effective intervention in controlling opioid addiction in the United States (Samuels et al., 2018). As a result, this study will focus on determining the efficiency of different pharmacological measures to assess the reliable ones in managing opioid misuse.

Medication-Assisted Treatment (MAT) is a proven medication for treating opioid use disorder. Drugs such as buprenorphine activate opioid receptors in the brain. They prevent the occurrence of painful withdrawal symptoms. This intervention is observed to improve patient survival and retention in treatment (Madden, 2019). From another aspect, it is observed to reduce the risk of criminal activities associated with substance use disorders (Maglione et al., 2018). Pregnant women with substance abuse disorders tend to have improved birth outcomes using MATs. Despite these advantages, it is noted that MATs have been around since the 1930s. This

means if they were effective in handling drug addiction, there would have been a lower rate of opioid use disorders in the country (Xavier et al., 2020).

### **Non-Pharmacological Practices**

Healthcare funding is an effective intervention in controlling opioid usage in the United States. Research reveals economics strongly influences the determinants of opioid overdose. Aspects such as housing, education, and other social structures are viewed to be controlled by the provision of funding (Van Draanen et al., 2020). Multigenerational economic stress is observed to increase the rate of opioid misuse in low-income families. It is argued that providing funds to low-income families may enable communities to reduce their usage of opioids. It is also argued that for the government to address the economic issues associated with opioid use, it is essential to evaluate the growth of economic inequalities via areas such as social investment, access to college, and tax codes (Monnat, 2020).

Research also shows engagement in counseling activities is associated with treating opioid misuse. Counseling is noted to change patients' behaviors and attitudes toward drugs, thus, reducing their tendencies to continue using opioids. In one study, the rate of clinically significant behavioral change from baseline to end of treatment was 42.1%. In addition, they help patients to develop reliable life skills. This act is observed to control the patient's addictive behaviors as they engage in constructive activities. From another aspect, counseling enables patients to stick to other aspects of opioid treatments (Barry et al., 2019). Hence, patients can adhere to nonpharmacological interventions used to manage opioid addiction. The researcher will clarify the importance of these methods in managing opioid addiction.

Different forms of counseling are common in the United States. For instance, individual counseling is done by practitioners across different areas. Standard methods in this type of counseling are cognitive-behavioral therapy (CBT) and motivational enhancement therapy (MET) (Cummins & Tobian, 2018). Regarding the methods used in managing individual counseling, cognitive behavioral therapy is shown to be relatively more effective than most interventions. The method increases the patients' capabilities of recognizing their negative patterns, giving them a foundation for controlling them. Patients are also observed to develop reliable coping skills. For instance, patients who use opioids to control their stress may be able to control the issue without using the drugs (Barry et al., 2019). Motivational enhancement therapy is a therapeutic intervention that is used to help individuals to identify and control factors that lead to their addiction. The method applies motivation and setting goals to manage addiction. The results show that the strategy works effectively if combined with pharmacological treatments. Therefore, it can be opined that CBT is relatively cheaper as it can be used independently (Gregory & Ellis, 2020).

Group and family counseling are also used in healthcare facilities. The main reason for group counseling is to make patients realize they are not alone in their addiction. A client listens to other people's struggles with similar challenges. As a result, a patient is made to develop new strategies for controlling their addiction problems. On the other hand, family counseling includes spouses or other family members. It enables patients to improve their behaviors by enhancing their relationships with other family members (Barry et al., 2019). Group and family counseling methods are essential because they enable members to discuss problems with their peers, giving them a foundation to understand various issues. The differences in these types of counseling help a patient choose the kind of intervention that suits their situation (Gregory & Ellis, 2020).

Von Korff et al. (2016) examined the impact of opioid risk-reduction strategies to control high-dose prescriptions for patients undergoing chronic opioid therapy. The research showed a significant reduction in the level of high-dose prescriptions. For instance, it was shown that the percentage of patients who required morphine prescriptions reduced from 16.8% to 6.3%. However, initiatives were more effective in group practice practitioners than in individual practitioners. This may show that implementing collaborative activities is reliable in managing high-dose prescriptions. In addition, the study by Volkow & Wargo (2018) found a reduction in opioid prescriptions in the United States. They observed an increase in awareness about the effects of opioids. The act led to the increase in the use of buprenorphine and naltrexone. While this may reveal that the opioid crisis is under control, it can be opined that if there had been a high level of awareness, the different waves of the opioid crisis would not have been significant. The researcher will fill the gap by examining the understanding of risk-reduction strategies in controlling opioids.

### **Summary**

This chapter provides an understanding of the existing literature on the research topic. The researcher opines that the section illustrates different perspectives on the study area. The researcher aims to understand the gaps in research on the topic, and the intersectionality framework is adopted to demonstrate the relationship between various factors and the outcomes (Persmark et al., 2020). The Bay Area Regional Health Inequalities Initiative (BARHII) framework is applied to describe the problem of health inequalities in the context of opioids (Bay Area Regional Health Inequalities Initiative, 2010). Drug addiction has been experienced even prior to the occurrence of the opioid crisis, hence showing that the United States has a long history of drug abuse. However, the opioid crisis has worsened the situation (Shipton et al., 2018).



The literature shows men have higher prevalence rates of heroin and nonmedical prescription opioid use than women. It was reported 17.7% of opioid-related deaths occurred among African American males. Only 5.4% of the deaths occurred among African American females (Hoopsick et al., 2021). Women are shown to be more likely to report healthcare conditions such as mental health problems after using opioids and respond better to maintaining opioid prescriptions (Huhn et al., 2019). African Americans and Latinos are portrayed to have higher rates of mortality associated with opioids than Caucasians due to differences in their access to quality care. Only 8.75% of opioid-related deaths occurred among Caucasian males while 17.7% deaths occurred among African American males (Hoopsick et al., 2021). Age is also a significant factor in the misuse and addiction of opioids (Tucker et al., 2020).

The use of opioids might lead to improvement in mental health by reducing pain and enhancing a sense of well-being (Moazen-Zadeh et al., 2021). Frequent drug use progressively diminishes the body's response to its use (Daoust et al., 2018). Physical problems are depicted to be more significant in patients with chronic conditions (Zylla et al., 2018). Increased usage of drugs affects individuals, families, and society (Hagemeier, 2018). The addicts and their families tend to experience financial strains as their income would be used for buying drugs (Florence et al., 2021). Opioid usage is also shown to be associated with death. For instance, between 1999 and 2016, about 600,000 people died due to overdoses in the country (Bernard et al., 2020). Aspects such as housing, education, and other social structures are viewed to be controlled by the provision of funding (Van Draanen et al., 2020).

## CHAPTER THREE: METHODS

### **Overview**

The study aimed to evaluate the impact of opioids on health and ways of controlling the problem. This chapter aligns with this purpose by discussing the different elements of research techniques that the researcher applied. The section also explains the study's procedures, research design, and analysis. It also provides a summary of different elements of the research methodology.

### **Study Design**

A research design is an overall strategy to integrate a study's components. It aims to investigate the research problem thoroughly. Qualitative, quantitative, and mixed methods designs are common in nursing research. Quantitative research designs aim at discovering how many people think, feel, or behave in a specific manner. They entail large sample sizes and concentrate on quantitative responses. On the other hand, qualitative research designs aim at collecting deeper insights into real-world problems. Rather than collecting numerical data points, these designs help generate hypotheses as well as further examine complex variables which are difficult to measure numerically (Busetto et al., 2020).

The researcher utilized a qualitative research design as it will help in attaining deeper understanding of the impact of opioids on users. The researcher also observed qualitative research methods are highly flexible, enabling adaptation of new techniques based on the emerging findings. The researcher also opined utilization of qualitative approaches emphasizes on understanding the topic context in which the participants' behaviors or phenomena occur. From this aspect, the approach will enable readers to have a comprehensive overview of the cultural,

social, and environmental issues associated with opioid usage in the population (Alharahsheh & Pius, 2020).

### **Grounded Theory**

The grounded theory is a study approach associated with creating a theory ‘grounded’ in the collected data. It also uncovers elements of social relationships and behaviors of various groups. The approach utilizes inductive reasoning. This enables readers to derive general ideas to attain specific conclusions accurately (Singh & Estefan, 2018). This means multiple solutions are developed to a problem or issue. A researcher can also develop judgments of specific issues and make decisions based on the situations. The grounded theory acknowledges different areas of conflict regarding other variables. It also effectively determines what should be applied in each situation (Alharahsheh & Pius, 2020).

The approach is modeled from the study by Goodman et al. (2020), which applied the grounded theory to examine factors that promote resilience and recovery among postpartum women with opioid use disorders. The study by Goodman et al. (2020) applied in-depth interviews to ascertain outcomes. Their approach guided the researcher to develop a suitable written approach inviting study participants. Analysis of this study’s data was also guided by the study from Goodman et al. (2020). In addition, the researcher ensured that the ethical approaches applied in the grounded theory approach of Goodman et al. (2020) were used.

### **Rationale for the Design**

The researcher applied the grounded theory approach. The approach has considerable advantages to the researcher as it provided explicit guidelines for engagement in the qualitative

collection and analysis of the study process. The study was qualitative because it focused on providing a deeper understanding of experiences, opinions, and concepts surrounding the issue of opioid misuse. For instance, it covered many details on the impact of opioids on the participants' health. It was also observed to apply specific techniques for using logical steps of inquiry. They included coding, conceptualization, organization, and development of themes (Chun Tie et al., 2019). Moreover, the approach was viewed to streamline and integrate the process of data collection and analysis. In addition, it ensured the conceptual analysis of the data was done effectively. The researcher opined that by applying this approach, the research findings effectively handle the issue of opioid usage and addiction (Alharahsheh & Pius, 2020).

### **Research Questions**

**Central research question:** Explore the impact of opioid use, addiction, and preventive practices on the health and wellness of African American and Hispanic Adults.

***Sub-Question 1: How does addiction affect health and wellness among African American and Hispanic adult users?***

This question aimed to understand the impact of opioid addiction on the study population. Addiction is a significant theme in opioid misuse across different populations. It is essential to examine its influence on patients. The problem leads to a financial decline, which is associated with an increased need to purchase drugs. It also has a profound effect on the mental and physical health of individuals. Addiction leads to reduced quality of life as a person cannot effectively engage in their daily responsibilities, and people with addiction will likely develop healthcare problems such as heart disease associated with long-term drug use (Kreek et al., 2019).

***Sub-Question 2: How do age, gender, and ethnicity influence opioid use and addiction among African American and Hispanic Adult users?***

Factors that affect opioid usage in society are essential. Based on the BARHII Framework, factors such as age, gender and ethnicity are significant factors that may influence different populations and could result in the misuse of opioids. In terms of age, there are differences in how young people utilize drugs compared to older individuals. Older adults were noted to engage in drug abuse more than their younger counterparts, as the adults do so to cope with life issues such as living conditions and declining health (Bay Area Regional Health Inequalities Initiative, 2010).

Regarding gender, it has been observed that males have higher tendencies to utilize opioids than their female counterparts. The feature emanates from their differences in the levels of drug response. Data from 31 articles revealed that women are more susceptible to relapse (Huhn et al., 2019). In addition, ethnicity influences opioid usage, as people from minority groups are more likely to use the drugs than their Caucasian counterparts. Research shows Latino (39%) and African American (44%) rates are higher than their Caucasian counterparts (33%) (Pouget et al., 2018).

The problem emanates from the low levels of income that minority groups experience. The researcher aimed to understand the factors specific to Hispanics and African Americans.

***Sub-Question 3: How do participants perceive the efficiency of opioid preventive practices on adult African American and Hispanic users?***

Measures used in managing opioid usage are also an essential theme in the study topic. It has been observed that interventions such as public health policies for controlling opioid usage are

applied by healthcare agencies as well as the government. Understanding the importance of these measures in the study setting is essential. The researcher opined that knowledge of the practitioners' preventive practices will help control the crisis effectively. It is crucial to attain qualitative information from the study based on the nature of the question. This approach comprehensively explains preventive interventions (Kreek et al., 2019).

### **Setting**

The study was conducted at Pathway to Recovery Counseling and Education Services, located in Hazleton, Pennsylvania. The researcher had the approval to carry out the study at the facility. The researcher needed one approval from the Institutional Review Board (IRB). The researcher observed that the site has many Blacks and Hispanics. Latinos comprised 13.5% of the population, while Blacks comprised 9.1%. This showed that a significant number of individuals would meet the criteria for the study's participation (Aguinis & Solarino, 2019).

The researcher believed the organized nature of the setting would aid the attainment of suitable outcomes for the research. For example, the researcher noted that the site had an organized method of collecting data, thus ensuring that both the researcher and the participants had a positive experience during the research process. The facility is within Luzerne County, which has a long-known drug epidemic history. With a population of over 325,000 people, about 3.1% of the population engage in substance abuse. People with substance abuse disorders in the area increased from 8,673 in 2016 to 10,046 in 2020 (Pinnacle Treatment Centers, 2023). Therefore, collecting data from the setting was essential in providing primary data on the problem (Slattery et al., 2020). This means the outcomes will reflect the impact of opioids on Pennsylvanian society and the measures put in place to control the problem. The respondents who participated in the study were

identified as Subject 1, Subject 2, Subject 3, etc., and the researcher ensured that unauthorized personnel did not have any access to the participants' identities (Moser & Korstjens, 2018).

### **Participants**

The issue of opioid addiction is viewed to affect African American and Hispanic adult users. Based on the study's purpose, only subjects from the two ethnic groups were involved in the study (Guillemin et al., 2018). The population will include 20 adults between 18-40 years old. Purposive sampling will be applied to get the required sample. Moreover, the researcher will only collect data from people with a history of opioid abuse to attain reliable findings. This will ensure that the data is provided from the participants' experiences (Busetto et al., 2020).

### **Securing Institutional Review Board (IRB) Approval**

The researcher underwent proper ethical training to ensure the handling of the participants will be done ethically. After that, the researcher submitted the protocol package of the study. This entailed making a request for a review of the participants, informed consent, copies of recruitment materials, and the questions to be utilized in the study. After sending the documents, the IRB board confirmed reception of the application via email.

### **Data Collection**

Data collection procedures can be grouped into primary and secondary methods. Primary data collection methods entail the attainment of raw data, while secondary data collection methods entail the collection of data that other researchers have already obtained and analyzed. The researcher utilized primary data collection methods in the study, involving approaches such as interviews, questionnaires, and qualitative observation (Johnson et al., 2020).

## **Interviews**

Interviewing refers to a method of data collection that involves a structured conversation. The researcher asks questions, and the respondent provides detailed answers about different aspects of the research topic (Denzin & Yvonna, 2018). Interviewing is essential as it will help provide detailed explanations on various parts of the topic, enabling the researcher to get a better understanding of the issues associated with opioid use (Leedy & Ormrod, 2019). Moreover, interviews make it easier for the researcher to explore the respondents' opinions about opioid use. Since the instrument entails open-ended questions, it will help generate in-depth knowledge on the topic (Edwards & Holland, 2020). The Prescription Opioid Misuse Index (POMI) is an instrument that was developed to screen for misuse of oxycodone in the United States. It was validated in 137 subjects in areas such as pain clinics, addiction treatment programs, and jails. The feature shows its application will be useful in the targeted setting. The tool is essential in assessing the risk of opioids as it evaluates factors such as personal history and social context. It also enables practitioners to identify high-risk individuals, thus enabling them to develop proactive measures for preventing or mitigating potential patient issues. Two "yes" responses indicate a positive screen and a possible diagnosis of opioid use disorder (Smith et al., 2019).

### **Prescription Opioid Misuse Index (POMI)**

1. Do you ever use more of your medication, that is, take a higher dose, than is prescribed for you?
2. Do you ever use your medication more often, that is, shorten the time between doses, than is prescribed for you?
3. Do you ever need early refills for your pain medication?



4. Do you ever feel high or get a buzz after using your pain medication?
5. Do you ever take your pain medication because you are upset, using the medication to relieve or cope with problems other than pain?
6. Have you ever gone to multiple physicians, including emergency room doctors, seeking more of your pain medication?

### **Questionnaire**

A questionnaire is an instrument that entails a list of questions used to collect data on opinions, experiences, or attitudes. Questionnaires can be used to collect qualitative or quantitative data. Since the study is qualitative, the researcher believes that applying open-ended questions will suit the study. It is observed, open questions will help the researcher to attain comprehensive answers about the study (Leedy & Ormrod, 2019). They enhance flexibility, enabling respondents to share experiences through reflective conversations. Such conversations stimulate respondents to think in-depth, and this makes them give insightful, detailed responses to the different questions they are asked. The researcher opined that questionnaires are fundamental for the study because they are easy to administer, and they provide a deeper understanding of the research topic. The researcher administered the research questions by emailing the questionnaires to the participants (Einola & Alvesson, 2021).

### ***Questions***

1. What were the main reasons for your use of opioids?
2. How do you feel about using opioids?
3. What could be the reason(s) for using opioids?

4. How long have you used opioids?
5. What types of opioids do you use? (prescriptive or nonprescriptive)
6. What social issues do you experience from your use of opioids?
7. What community or healthcare strategies for controlling opioid use have been applied to control your problem?

### **Observation**

Observations refer to data collection methods that involve applying one's intellectual senses while collecting data. Usually, a researcher can show conversation engagement through active listening. The method enables a researcher to watch other people's behaviors (Ciesielska et al., 2018). Therefore, they can make subjective conclusions about an issue as the researcher's perception determines the outcomes (Leedy & Ormrod, 2019). The method is also administered efficiently, enabling researchers to complete their engagement effectively. The researcher believes that this method will help to note the experiences and behaviors of opioid addicts (Ciesielska et al., 2018). For a period of one day, the researcher interacted with the participants to evaluate their behaviors regarding opioid usage, as well as the mental and physical effects of opioids on the patients. The researcher recorded the observations in a written note form. The observations recorded were based on the sub-questions. This would help determine if the methods used to control opioids were effective.

### **The Researcher's Roles**

In a study, a researcher plays various roles in improving the quality of the research process and outcomes. The researcher gathered and evaluated participant data for this study to ensure reliability. The researcher also adhered to the applied methodologies. This ensured that the

fieldwork was done as required (Corlett & Mavin, 2018). It was required that the researcher also apply ethical considerations in the study. For instance, when handling the participants, they should be mandated to be honest, and they should also be made to understand the study's requirements, to ensure appropriate adherence. Applying ethics also ensured that the research findings were objective and accurate (Reid et al., 2018).

The researcher also tried to assess the feelings and perceptions of the respondents. This required asking the participants personal questions. The questions were asked respectfully to show that the researcher considered their dignity. Through different ways, the researcher addressed the “why” and “how” of the study elements and this provided a deeper understanding of the respondents' experiences with opioid usage (Collins & Stockton, 2018). The researcher also asked elaborate questions to get more detailed information about the different experiences of opioid use. It is also the researcher's role to ensure that the participants experience the research process according to their expectations (O'Connor & Joffe, 2020).

The researcher also protected the interests of the participants by avoiding unnecessary harm during their engagement. This enabled the respondents to provide reliable information, as they were confident that external factors will not affect it (Nyström et al., 2018). The researcher also protected the data obtained from the study to avoid bias or distortion of the outcomes. Additionally, the researcher also gathered and compared different resources to improve the validity of the research findings, while also ensuring that the research findings were shared in an honest manner (Johnson et al., 2020).

## Data Analysis

Grounded theory analysis was used for data analysis. This method focuses on the generation of theory. It is observed to uncover issues such as social behaviors and relationships. An essential feature of this approach is that data collection and analysis of different research aspects are done simultaneously (Charmaz & Thornberg, 2021). Moreover, different categories in the study are developed inductively. The researcher believed that the associated social processes will be part of the acquired data, as opioids have been shown to have societal impact (Leedy & Ormrod, 2019). The researcher identified the specific areas of interest when carrying out the study. Before the analysis, the researcher avoided theoretical preconceptions (Santos et al., 2018). Data collection for this type of analysis is required to entail in-depth information. The questions can be adjusted as the theory is developed. Therefore, the analysis method is essential to develop questions specific to the participants' experiences (Singh & Estefan, 2018).

Theoretical sampling was applied in the generation of data. This process entails the creation of a theory from the collected data. After data collection, the data was coded using open, axial, and selective coding before being analyzed. The data was labeled and organized in terms of themes during coding. After these steps, the researcher decided on details that needed more exploration as the theory emerged (Florence, 2021). In this type of data analysis, theoretical sensitivity is necessary. This feature requires a researcher to have the capability to create suitable meanings for the collected data, understand the meanings of the data, and differentiate whether the data is relevant to the topic or not (Singh & Estefan, 2018).

The researcher used thematic analysis that is driven by the grounded theory. This method was chosen because it is informative in cultural research. Thus, it enabled the researcher to

understand different cultural elements associated with opioid usage in the participants (Cutler et al., 2022). Using thematic analysis, the researcher found repeated themes by reviewing the collected data. This was done on the three data collection methods. The emergent themes were coded using phrases and keywords. The codes were then hierarchically grouped into concepts. Then the concepts were categorized through relationships. The themes were then reviewed to determine if they have many contradictions. The researcher also evaluated if the themes were broad, to determine whether to split the themes or move some codes into other themes (Chun Tie et al., 2019). The software MAXQDA (v2022.0.0) was used for the thematic analysis and coding of themes.

### **Reliability of the Instruments**

Reliability refers to the extent to which a research instrument provides similar outcomes. It is associated with the yielding of accurate and stable outcomes. The researcher ensured that the questions were asked similarly for the interviews and questionnaires. Moreover, the researcher asked many questions on the same phenomenon (Ortega-Toro et al., 2019). Applying questionnaires, interviews, and observation in qualitative research has shown to be reliable, hence, the researcher utilized these instruments to improve the reliability of the study (Aguinis et al., 2019).

### **Trustworthiness**

Trustworthiness is also known as the rigor of a study. It refers to the level of interpretation of a study, the confidence in the data, and the techniques involved in enhancing the quality of the study. There are four elements of trustworthiness that the researcher applied: credibility, dependability, transferability, and confirmability. To increase trustworthiness, the researcher

ensured that member checks were done, involving pre-interview screening of participants to confirm their opioid use history, ethnicity, etc. There was also prolonged engagement with the participants to ensure that they provide reliable responses. Expert peer reviews also improved the study's trustworthiness (Hamilton et al., 2020).

### **Credibility**

Credibility refers to the truth level entailed in the study findings (Haven & Van Grootel, 2019). From this aspect, it depicts whether the results represent the data attained from the respondents. It also shows whether a researcher utilized reliable means to handle the data analysis activities (Hussain et al., 2020). The researcher thoroughly scrutinized the data to achieve credibility in the study, in order to identify any mistakes associated with data collection, thus, improving the quality of the outcomes (Abdalla et al., 2018). Moreover, the researcher ensured persistent observation of the data collection processes to control the risk of errors. In addition, the researcher analyzed the data based on the theoretical frameworks, to ensure that the outcomes had referential adequacy (Vander Kaay et al., 2018).

### **Dependability**

Dependability refers to the level of reliability and consistency of study outcomes. It is also associated with the level of documentation of the research procedures (Nassaji, 2020). To achieve this element, the researcher provided a detailed description of the methods used in the study. The researcher also evaluated the steps involved in the techniques to provide similar outcomes (Singh et al., 2021). In addition, the researcher utilized peers' services to review and examine all the processes involved in data collection and analysis. The researcher also ensured that the data supported the recommendations provided in the study (Boucerredj & Debbache, 2018).

### **Transferability**

This element refers to how the study outcomes can be applied in other contexts (Stahl & King, 2020). For instance, it reveals how the outcomes of African Americans and Latinos in Philadelphia can be used for a similar population in other cities in the United States. The researcher observed that a comprehensive description of the research context improved the transferability of the study (Amin et al., 2020). This was done by providing detailed information about the population, the site, and the procedures applied in the study. Moreover, the researcher observed that the description of assumptions improved the transferability of the study outcomes. Also, the researcher described their role in the research activities (Smith, 2018).

### **Confirmability**

This element refers to the capability of study outcomes to be confirmed by other researchers. It aims to develop insight and interpretations from the collected data (Carminati, 2018). This means that when other researchers review the data collection and analysis procedures, their outcomes will be similar to what the initial researcher had (Kyngäs et al., 2020). The researcher improved the confirmability of the study by initiating an audit trail showing various data analysis steps. The trail also showed that the findings did not have any bias. Instead, they revealed that the outcomes aligned with the responses from the participants (Korstjens & Moser, 2018).

### **Threats to Internal and External Validity**

External validity refers to the extent to which the findings of a study can be generalized to other scenarios. It determines whether the outcomes of a study can be applied to a broader context.

A high level of external validity can help study findings be used by other people in society, helping solve different societal challenges (Patino & Ferreira, 2018). The researcher observed that one of the issues that can threaten the external validity of the study is selection bias. This entails making an error in choosing the participants. For instance, the researcher opined that some of the participants chosen may have only some of the required features to be included in the study. The participants were selected without randomization. This may also lead to selection bias (Flannelly & Jankowski, 2018).

Internal validity refers to the extent to which other factors cannot explain the cause-and-effect association established in a study. A high level of internal validity means that the association's conclusions are credible and trustworthy. Therefore, a low level of validity may limit a study's demonstration of links between two variables. In the case of this study, low internal validity may make it difficult to depict the relationship between opioid use and health challenges in users (Chaplin et al., 2018). One of the threats to internal validity is history. This means that if the data collection between different people took longer than expected, the time lapse may lead to outcome variations. Although this was not the case in this study, it is important to note another slight challenge, which was that the instrumentation used in the qualitative processes was not entirely suited for depicting straightforward answers (Flacking et al., 2021).

### **Ethical Considerations**

Ethical considerations guide a researcher to adhere to ethical norms in a study. The norms help promote the objectives of a study, such as minimization of errors, attainment of knowledge, and maintenance of truth from the study outcomes. In this study, the researcher upheld the



following considerations: informed consent, voluntary participation, confidentiality, protection from harm, and communication of research outcomes (Ingham-Broomfield, 2017).

### **Informed Consent**

This consideration is associated with providing reliable information, which can make potential participants decide whether they can participate in a study. To uphold this consideration, the researcher explained the study's intention to the participants. The participants were made aware of what they can expect from the research and what is expected of them. They were made to understand the different methods of data collection and their protection during the data collection activity. In addition, they were informed about the potential benefits and risks that can occur during the study. The participants signed informed consent forms. The forms were provided prior to engagement in the study. They read all the requirements and expectations before signing the forms (Williams & Anderson, 2018).

### **Voluntary Participation**

Voluntary participation shows that respondents are free to participate in the study without coercion. This means that participants in a study are only involved due to their preferences. The researcher considered this element by explaining to the participants that they can engage in the study if they find it favorable. They were also made to understand that they are free to withdraw from the study at any point, as they would not be obliged to continue. In addition, the participants had the liberty to choose the mode of data collection they preferred to be used in their own case (questionnaire or interview). The participants were informed that they may refuse to answer specific questions in the study if they did not intend to (Williams & Anderson, 2018).

### **Confidentiality**

This principle focuses on keeping the identity of participants anonymous. It also requires that the information provided during the data collection is confidential. To uphold this principle, the researcher avoided using the names of the participants in any part of the data collection, analysis, or reporting. The researcher assigned new subject identities to the participants for data analysis. When collecting data electronically, the researcher included a secure password-protected device. When any information was sent via the Internet, the researcher ensured that it was encrypted. In addition, all identifiable information was removed before finalizing the study report (Leedy & Ormrod, 2019).

### **Protection from Harm**

This principle aims to avoid embarrassing, frightening, or offending the participants. Usually, the risk of harm in a qualitative study is not greater than in typical real-world scenarios. The respondents were not exposed to risks they may not encounter daily. The researcher upheld this principle by avoiding the application of deceptive means during the study's design. The participants were allowed to withdraw from the study without any repercussions. Moreover, the issues discussed during the data collection processes were not forwarded to the authorities in the facility (Leedy & Ormrod, 2019).

### **Communication of the Research Outcomes**

This principle is associated with adequately providing the correct information. It aims at avoiding harm to different stakeholders of a study process. For this study, the outcomes were devoid of personal information. The researcher ensured that the outcomes were presented as they

were attained. This means that falsification of the outcomes was avoided. The researcher also ensured that information not attained during the data collection and analysis was not included in the findings. Moreover, the researcher only omitted part of the collected data if it aligned with the study's expectations. The narration in the finalized report depicts respect for human dignity (Leedy & Ormrod, 2019).

### **Summary**

This section discussed different methods that were applied in the research process. Given that the study was qualitative, the researcher applied the methods that align with the study design to attain quality outcomes. It was shown that while there are different research designs in qualitative studies, the grounded theory approach was the most suitable for the study topic. The researcher ensured that there was appropriate theory generation from the study findings. The study's data collection instruments aligned with the grounded theory research requirements. This section revealed that the data collection process was concurrent with the analysis. Despite the efficiency of the different data collection instruments, there were potential threats to the external and internal validity of the research. The study also upheld other elements of ethical consideration to improve the quality of the outcomes.

## CHAPTER FOUR: FINDINGS

### Overview

The primary objective of this study was to delineate the repercussions of opioid use on African Americans and Hispanic adults, specifically those within the 18 to 40 age demographics, at Pathways to Recovery Counseling and Education Services located in Hazleton, Pennsylvania. The research was meticulously executed through collection of data from a carefully selected sample group comprising twenty individuals each of whom identified as either African American or Latino. The participants were actively engaged in therapeutic services at the aforementioned facility during the period of the study. The subsequent section of this paper offers a comprehensive summary of the findings extrapolated from the data, commencing with a thorough depiction of the study's participants. To ensure confidentiality and to uphold ethical research practices, each participant was attributed a pseudonym to safeguard their personal identity. Subsequently, the data encapsulated in the form of thematic patterns, is systematically articulated in correlation with the specific research questions guiding this study. The section concludes by offering a succinct summary of the various sub-sections. This summary synchronously aligns with the subsidiary research questions, thereby contributing to the provision of nuanced and detailed response to the overarching question propelling the study. The overarching purpose of this research was to shed light on the profound and possibly unique effects of opioid use within these specific cultural communities, thereby contributing to the broader discourse on substance abuse and its societal impacts. By focusing on these demographics and employing comprehensive data collection strategies, this study hopes to offer valuable insights that could inform future therapeutic interventions and policy decisions.

## **Participant Demographics**

The researcher documented the participation of 20 respondents who willingly opted to be part of the study and contributed their unique perspectives related to the research topic. Each study participant extended valuable information about their respective backgrounds, principally focusing on their cultural affiliations, thereby establishing a diverse and inclusive research environment. Individual interviews were conducted with each participant, facilitating an in-depth exploration of their understanding and personal experiences related to opioid use. This approach allowed for a comprehensive understanding of the impact opioid use has on their overall health and daily lives. The interviews provided a platform for participants to express their experiences candidly, thereby furnishing the study with rich, qualitative data. In terms of ethnicity, the pool of participants was exclusively composed of individuals identifying as either African-American or Hispanic. Consequently, this study not only explores the impacts of opioid use but also contributes to a broader understanding of this issue within these specific ethnic groups. By focusing on these two ethnic populations, the study aims to shed light on the possible cultural nuances that may influence opioid use and its effects. The unique cultural insight gained from these participants could potentially help in tailoring more effective and culture-specific interventions for opioid use. Outlined in Table 4.1 below are the demographic characteristics of the patients.

**Table 4.1***Participants' Demographic Characteristics*

<b>Pseudonym</b>	<b>Age</b>	<b>Gender</b>	<b>Ethnicity</b>	<b>Years of Addiction</b>
Ali	36	Male	African American	12
Amo	40	Male	Latino	12
Tony	33	Male	African American	2
Batho	26	Female	Latino	8
Bobby Jo	37	Male	Latino	6
Bram	25	Male	Latino	2
Cali	18	Male	Latino	3
Druzo	27	Male	African American	6
Feliza	35	Female	Latino	15
Johny	32	Male	African American	14
Nat	29	Male	African American	3
Kando	28	Female	Latino	9

Kel	33	Female	African American	12
Mike	31	Male	African American	8
Rhetoza	26	Male	Latino	11
Rodriguez	32	Male	Latino	14
Ortiz	31	Male	Latino	7
Jenty	24	Female	African American	6
Maria	28	Female	Latino	9
Sonia	37	Female	African American	13

**Fig 4.1**

*Pie chart showing age range of African American participants.*

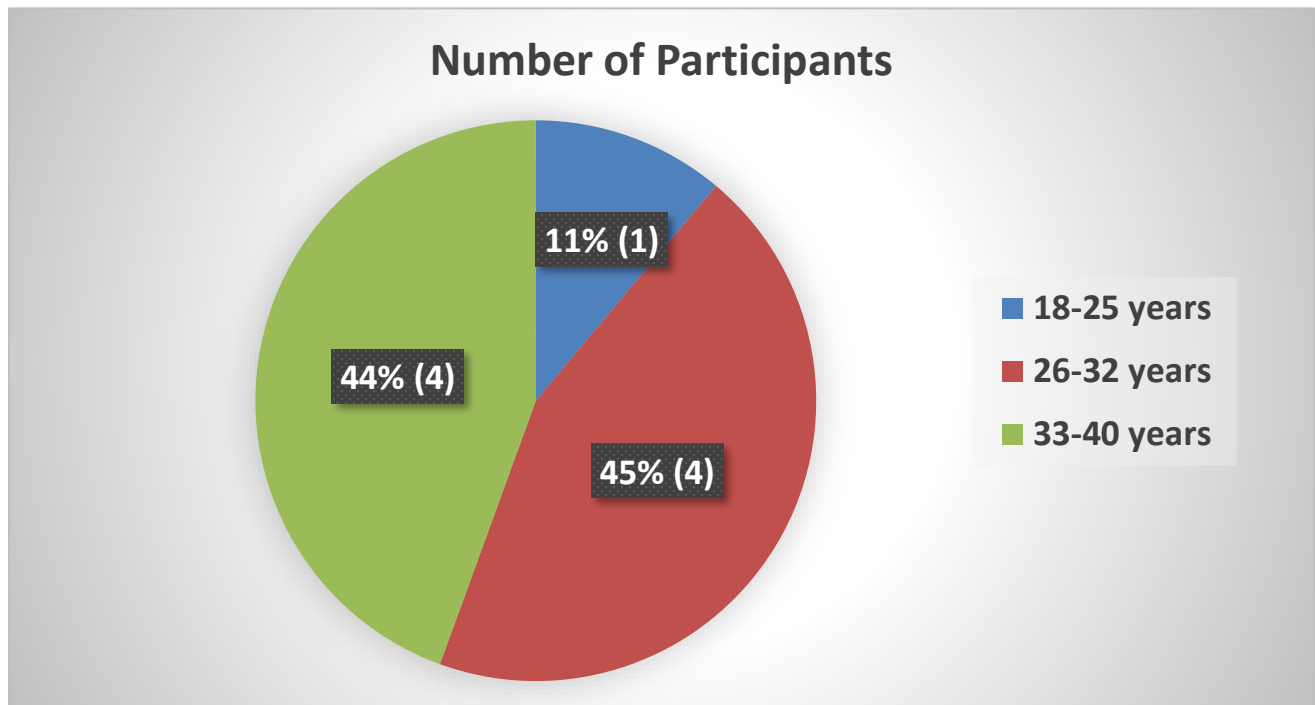


Figure 4.1 represents a detailed demographic analysis of participation rates within the African American community, specifically focusing on age groups. The data depicted on the chart reveals interesting trends regarding the distribution of participation among different age groups. The age group with the least representation comprises individuals between the ages of 18 and 25 years. This suggests that individuals within this age bracket contribute to a significantly smaller proportion of participants. On the other hand, the chart reveals a comparative analysis between two distinct age brackets: those between 26 and 32 of age, and those between 33 and 40 years of age. The data indicates that these two groups have similar participation percentages.



**Fig 4.2**

*Pie chart showing age range of Latino participants.*

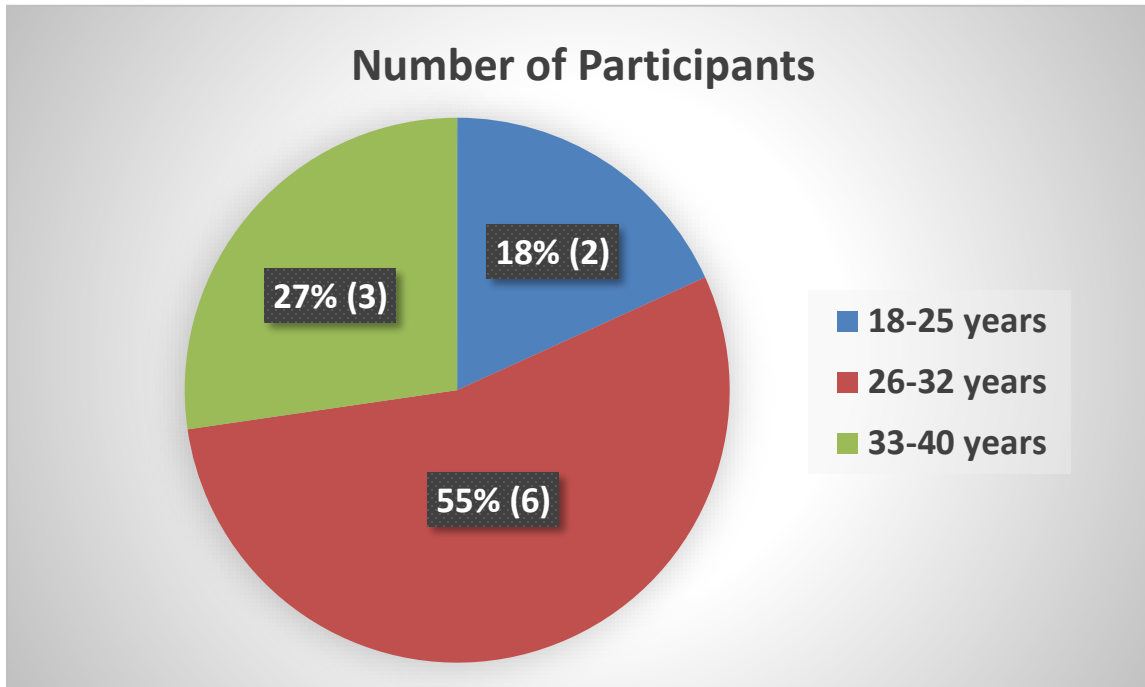


Figure 4.2 above illustrates the age demographics of participants from the Hispanic community engaged in the study. The most populous age bracket comprises individuals ranging between 26 and 32 old. This demographic constitutes the majority, signifying a high level of participation from this age group within the Hispanic community. It is also noteworthy that the second most represented age group is not the immediate adjacent bracket (that is those between 18 and 25 years), but rather the group consisting of individuals between 33 and 40 years. Overall, the study's participants from the Hispanic community primarily fall within the 26 to 40 years age range.

## **Participant Summaries**

After administration of the study questionnaires and implementation of interviews with the participants, a summary of each individual involved in the study was coined to provide an overview of their condition as regards opioid misuse and addiction.

### **Ali**

Ali was a 36-year-old African American male. He disclosed that he began using opioids as a way of evading reality, however, he also expressed a lack emotional connection to it, and did not have any feelings regarding his use of opioids. There were no other reasons for his use of opioids, and his addiction lasted 12 years. Ali had been maintaining sobriety since 2015, but unfortunately, he faced a setback in the form of a relapse approximately one year ago. His substance misuse was primarily centered on non-prescription drugs, predominantly fentanyl. As the consumption continued, he experienced an escalating craving for the drug, a factor that gradually resulted in his social withdrawal. Eventually, his struggle with opioid misuse led to legal complications, and he was detained in a correctional center. Before his involvement with Pathway, no other community strategies had been employed to address his addiction. Upon joining the Pathway program, he was enrolled on Subutex to manage his addiction while he was in detainment.

### **Amo**

Amo was a 40-year-old Latino male who became addicted to painkillers following an accident that occurred about twelve years ago. He explained that his opioid addiction emerged due to a surgical procedure he underwent, during which doctors prescribed painkillers in abundance to manage his post-surgery pain. Initially, his doctor was unaware that he had become addicted to the

painkillers. Even after discovering his addiction, the doctor continued to prescribe the drugs, which further worsened his opioid addiction. Things took a tragic turn when the prescribing doctor committed suicide, compelling Amo to seek a new practitioner.

His addiction to opioids had multiple consequences, resulting in the loss of friends, a divorce, and legal troubles that led to incarceration. A friend introduced him to rehab, which helped him overcome his addiction to the prescription pills. However, he felt a sense of coercion in the recovery process. The participant revealed that during the period of substance abuse, he was able to access drugs from sources beyond the facility where he obtained his prescriptions. He also admitted to having thoughts of self-harm and misuse of other people's medications, and his struggle with opioid addiction once caused him to seek care in the emergency room for an overdose five years ago. Despite these challenges, he shared that he had been clean for approximately a year at the time of the interview.

### **Tony**

Tony was a 33-year-old African-American male adult who revealed that his addiction began from the use of opioids to manage his back pain. He explained that during a certain period of unemployment, he felt a profound sense of lowliness, which made him experience more pain, and he began to use fentanyl and cocaine to control his back pain for about two months. However, he developed an addiction to the drugs, both prescriptive and non-prescriptive. Tony disclosed that he was addicted for two years, felt isolated, and the opioids made him feel "naughty" most of the time. He also found difficulty carrying out some routine tasks. Conversely in his case, Tony did not source his drugs from locations beyond the facility, and he did not experience any thoughts of

self-harm. He eventually learned of a community program that enabled him to manage his addiction problem. He reported not experiencing back pain anymore at the time of the study.

### **Batho**

Batho was a 26-year-old Latino female. According to her, opioids are mainly used to numb physical and psychological pain, and she disclosed that she began using opioids to manage social anxiety and general anxiety. She began using Oxycontin in the 12th grade and escalated to injecting heroin by 2018. She attributed her addiction solely to non-prescription opioids, which affected her schooling and made it difficult for her to secure a job. Her opioid use was further exacerbated by continued consumption of alcohol. She narrated the trend of social stigma associated with heroin injection in her community, where addicts are often labelled as “junkies and scumbags”. Batho believed that addicts could function as valuable individuals in society when sober but may lose their societal value or acknowledgement when continually under the influence of drugs. To control her addiction, her primary care physician utilized Suboxone; however, she admitted that the drug was also addictive, further complicating her recovery journey.

### **Bobby Jo**

Bobby Jo was a 37-year-old Latino male who admitted that he began using opioids because he enjoyed the euphoric effect it gives. His use of opioids began with non-prescriptive medications, which kept him addicted for six years. He expressed that he felt like a “junkie” at the time he was using the drugs and also felt like he was losing sense of his true self. In addition, he experienced negative perceptions from people in the community due to his drug addiction. He primarily used heroin and fentanyl, but instead of being taken to a rehabilitation facility, he was sent to jail. He stated that he did not contemplate self-harm; however, his struggle with addiction made him resort

to using drugs that belonged to others. He revealed that he once ended up in the emergency room, but this was prompted by his desire to obtain free narcotics.

### **Brum**

Brum was a 25-year-old Latino male. He revealed that he began using opioids because of social and peer influence, not necessarily to manage pain. He had been addicted to Percocet for two years, during which he experienced adverse effects from the drugs that led to a decline in his health. He lamented the lack of community support he faced during this challenging period, resulting in separation from his children due to the impact of the addiction on his life. He shared that since he joined the Pathway program on his journey toward recovery, he noticed a positive change in his symptoms.

### **Cali**

Cali was an 18-year-old Latino male. He revealed that he began abusing opioids as a coping mechanism to handle stress. He depicted that the drug would make him feel “high” for about four hours, and he had been using opioids since he was 15 years old, resulting in a 3-year addiction. He disclosed that his addiction only entailed non-prescriptive drugs, and he specifically used fentanyl but avoided using cocaine. Cali revealed that after he started engaging in drug abuse, it impeded his cognition and emotional control, which led to a decline in his memory, causing him to have bad grades and made him get into arguments frequently. Despite these challenges, he affirmed that he never contemplated self-harm. He acknowledged the fact that members of the community felt remorse on his behalf and played a supportive role by continually advising him on the detrimental effects of drug use. Through the help of Children and Youth services, he learned about Pathway

to Recovery Counseling and Education Services, which has been beneficial in his recovery journey.

### **Druzo**

Druzo was a 27-year-old African American male. He admitted that his motivation for using drugs was primarily to experience a sense of euphoria rather than manage pain. He stated that using the drugs made him feel good, and he had used the drugs for about 12 years. He disclosed that he only indulged in non-prescriptive drug abuse, specifically the use of Percocet. The participant attributed the occurrence of his addiction to misinformation, as he was unaware that he was using synthetic heroin. Although he did not contemplate self-harm, he acknowledged some instances of drug overdose.

### **Feliza**

Feliza was a 35-year-old Latina female. She shared that her primary motive for engaging in opioid abuse was depression. She felt that opioids made her feel empowered and gave her a sense of invincibility as if she could conquer the world. She was addicted to the drug for about 15 years, thus, depicting a long history of opioid addiction. The opiates that she used were mostly prescriptive, with Tramadol being a notable choice that led to a loss of interest in her social life. Her addiction problems had an adverse effect on her social experiences, contributing to a negative impact on her overall well-being. Subsequently, she went through drug and alcohol rehabilitation, and underwent a psychotherapy approach as part of her journey towards recovery.

**Jonny**

Jonny was a 32-year-old African American male who revealed that he began using opioids when he was 17 years old. He underwent surgery which required him to take prescriptive painkillers. He gradually became addicted and began buying painkillers from the streets. He was addicted to the drugs for 14 years, as the drugs gave him positive feelings and improved his self-perception. Although he had no problems with anger management during his addiction, he acknowledged that he had difficulty thinking clearly, developed thoughts of self-harm, and recounted an overdose incident five years back. Recognizing the need for intervention, he sought assistance from a community rehabilitation center to manage his addiction problem.

**Nat**

Nat was a 29-year-old African American male who revealed that the onset of his opioid addiction was prompted by the desire to alleviate both physical and emotional pain. He used the drug for about three years on an intermittent basis while he was resident in New York. He explained that he felt isolated when he engaged in opioid use, and it also led to his engagement in frequent alcohol consumption which further complicated his situation. The impact of the drugs extended to his personal connections, which caused arguments and other challenges in his relationship with his partner. He eventually started using other people's opioid prescriptions to cope with his addiction needs.

**Kando**

Kando was a 28-year-old Latino female. She did not specify the reason why she began using opioids. However, she expressed a sense of shame when she began using the drugs. During the initial phase of her addiction, she hid her activities from those around her to avoid stigma. She was addicted to the drugs for about nine years, which she felt helped her to fit in socially. Percocet was her initial drug of choice before she began using heroin, as the drug provided her with more energy. She enrolled for drug rehabilitation services twice, and her involvement with drugs led to her detention in a correctional facility. She also stated that she had difficulty engaging in various routine tasks the previous year. However, she asserted that she has been drug-free for the past 19 months.

**Kel**

Kel was a 33-year-old African American female who began using opioids to control her depression and loneliness. She admitted feeling guilty about using the drug, but continued to use them as they made her feel good. She was addicted for more than 10 years, with the drugs being non-prescriptive in nature. The use of opioids made her fear being around people because she felt she had messed up and would be condemned for it. She expressed that she often experienced memory loss due to her addiction problem, developed thoughts of self-harm, and had challenges with anger management. Kel sought support primarily through Pathways, utilizing it as a community resource to address her addiction. She also acknowledged that the interventions used were effective in helping her control her addiction.



**Mike**

Mike was a 31-year-old African American male who revealed that his journey with opioids began following a traumatic incident that left him in pain. This led doctors to prescribe potent medications like fentanyl, Roxicodone, and methadone to manage his pain. He abused the drugs for about four years, and when the practitioners cut him off from the prescription opioids, he began using heroin as a substitute to cope with the lingering pain. He explained that the drug induced a sense of numbness about life, making him lose ties with his family and triggering other negative consequences such as job loss, inability to secure partial custody of his child, and subsequent incarceration due to his drug addiction. He disclosed that the community he was resident in contributed negatively to his continued opioid use. To satisfy his addiction needs, he resorted to stealing drugs from other people. He also recalled having gone to the emergency department on one occasion eight years back because of his withdrawal symptoms.

**Rhetoza**

Rhetoza was a 26-year-old Latino male who started using opioids when he was 15 years old. He narrated that his environment, coupled with the influence of friends, were the key factors that led to relapses throughout his struggle with addiction. Although he felt terrible about using the drugs and had feelings of insecurity, the drugs made him feel on top of the world. He struggled with addiction for 11 years, with Percocet as his initial drug, before transitioning to oxycodone and heroin subsequently, which were all used non-prescriptively. As a result of his addiction, he became malnourished and developed poor hygiene, while facing additional challenges such as memory loss, unemployment, and persistent arguments. Subsequently, he was criminally charged for possession of the drugs.

**Rodriguez**

Rodriguez was a 32-year-old Latino male who revealed that his use of opioids was initially driven by a desperate desire to end his life. However, he ended up becoming addicted to the drugs without any fatal consequences. He recalled that he began using the drugs when he was 18 years old and became addicted for 14 years, and he described his addiction period as the worst part of his life. He started using Percocet, and gradually switched to fentanyl about three years ago. At first, the drugs were prescribed for pain management, but he consistently used them illicitly. Despite his addiction problems, he explained that he did not experience any feelings of isolation, he was able to keep his job, and was also able to take care of his kids. He was compelled to seek rehabilitation as a step towards recovery when his mother discovered his addiction struggle.

**Ortiz**

Ortiz was a 31-year-old Latino male. He revealed that the reason he began using opioids was to manage the resultant pain from when he broke his ribs, leading to the prescription of Vicodin for pain management. He realized that he liked the drug and continued to use it until he became addicted over a period of seven years. Aside from the pain relief, he stated that the drug made him feel nauseous, and he became isolated from the community and his family. The effect of the drug hindered his ability to complete tasks and plunged him into multiple conflicts with other people. Despite these challenges, he was not bothered about his use of drugs, and his addiction cravings often led him to take drugs belonging to others.

**Jenty**

Jenty was a 24-year-old African American female who had experienced opioid addiction for six years, starting from high school when one of her peers introduced her to heroin. A major reason she continued using the drug was because it made her forget her problems, thus providing a temporary escape from the challenges that life presented. Jenty acknowledged that her family consistently supported her during her period of addiction. However, the toll of opioid use on her mental health was evident, as she started being violent to people around her. She stated that the utilization of community resources for management of opioid addiction gave her a foundation for her opioid recovery process.

**Maria**

Maria was a 28-year-old Latino female who revealed that she began using fentanyl when she was 19 years old, and her addiction lasted nine years. Although her parents had taken her to various rehabilitation centers, she was unable to recover. However, she opined that the rehabilitation activities helped her reduce the number of drugs she consumed daily. She affirmed that at some point, she began to develop suicidal thoughts, which occurred more frequently when she had negative experiences. She also stated that she did not use any other type of opioid.

**Sonia**

Sonia was a 37-year-old African American female who struggled with opioid addiction for about 13 years. She had earlier committed a crime that led to her being imprisoned for six months. When she was set free, she realized that she was lonely, and found it difficult securing a job, which limited her ability to earn an income and rebuild her life. As a result, she was forced to move to

the streets which were harsh and demanding. To cope with her adverse mental and economic challenges, Sonia began using opioids. She explained that she initially did not have a favorite drug, but along the way, she began to prefer fentanyl over other drugs. She believed that her drug abuse behavior was what led to her breaking up with her boyfriend.

## **Results**

### **Theme Development**

This portion provides a narrative about the themes that were generated from the study. The themes were grouped into three main sections in alignment with the main question and the sub-questions: impact on health and wellness, influence of ethnicity, impact of age, gender, and ethnicity, and opioid management practices. To attain the themes, the researcher utilized axial coding, a form of inductive coding that enabled the researcher to start from scratch and develop codes based on the presented data, thereby aligning with the needs of a grounded theory approach. The thematic analysis and coding of themes was done with the software MAXQDA (v2022.0.0).

**Table 4.2: Theme Development**

<b>Trigger Questions</b>	<b>Extracted Codes</b>	<b>Themes</b>	<b>Subthemes</b>
How does addiction affect health and wellness among African American and Hispanic adult users?	Violence Vomiting Poor relationships Homelessness Jail Poverty	Mental health	Increased anxiety Increased depression Reduced reasoning
		Social life	Loneliness Breaking up of relationships Increased violence Imprisonment
How do age, gender, and ethnicity influence opioid use and addiction among adult African American and Hispanic users?	Peer pressure Evading reality Treatment Lifestyle Fentanyl availability Poverty	Time of addiction	Longer addiction period Increased relapses
		Causes of addiction	Prescriptive drugs Availability of fentanyl Poor lifestyle
How do healthcare practitioners perceive the efficiency of opioid preventive practices	Community Rehabs Resources Medication Counseling	Community initiatives	No effective counseling services. Jail No structures for management

on adult African American and Hispanic users?	Jail	Medication initiatives	No significant use of medication Continued relapse
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### Research Question Responses

***Sub-Question 1: How does addiction affect health and wellness among African American and Hispanic adult users?***

The findings reveal that drug addiction led to social issues such as feeling isolated from family and friends among 45% of the participants. Some participants were unable to maintain positive relationships with their family members, thus leading to a life of misery. For instance, Tony revealed that his use of opioids led to isolation from his family members. Social isolation had a huge toll on Tony's life, making it difficult for him to return to his previous lives well. Despite social isolation being a significant issue in Tony's life, it did not make him develop suicidal thoughts. In addition, engagement in drug use also led to feelings of regret and shame for some participants. They were not able to associate with those around them.

*“So, at first, I was quite ashamed, um, when I first started using it because, um, like I wasn't brought up like that, so it was like very shameful for me. And then after that, it became just kind of like a regular thing,” – Kando*

Moreover, it was shown that opioid abuse made about 35% of the participants verbally violent, and they often engaged in arguments with other individuals around them. This meant that

the participants had problems with managing their emotions, as they were unable to tolerate other people's perspectives. Their anger issues often affected their interpersonal relationships and marriage, resulting in the loss of friends and divorce. In some cases, their anger management issues often led to their arrest. Such turn of events often made them lose their jobs and made it difficult to secure employment subsequently. The job loss and absence of income led some of the participants to indulge in criminal activities. For instance, Mike and Amo revealed they ended up in correctional facilities as shown below:

*"I pretty much lost everything in my life and ended up in prison...Uh, I was in prison from late 2016 to 2021," – Mike*

*"I got a divorce because of my addiction. Um, and I also ended up in jail," – Amo*

Based on Mike and Amo's responses, it was observed that opioid abuse has a negative impact on an individual's lifestyle. Loss of employment and income among 30% of the participants made it difficult for them to cope economically. For instance, Tony revealed that he began feeling low when he lost his job due to his drug addiction, leaving him with no money to cater for his needs. Another participant, Amo, experienced multiple consequences related to his addiction, including loss of friends, a divorce, and legal troubles that led to incarceration. Some other participants engaged in criminal activities due to their lack of jobs, to get money to purchase opioids to meet their addiction needs. This explains why many of the participants were imprisoned during their period of opioid addiction.

***Sub-Question 2: How do age, gender, and ethnicity influence opioid use and addiction among adult African American and Hispanic users?***

The research showed that age had a significant impact on opioid usage. It was observed that 45% of the participants had started using the drugs as teenagers and were unable to control it with time. They would utilize more than one drug, hence, making their addiction a big problem. This often resulted in the participants having addiction problems for more than ten years. For instance, Druzo revealed that he had experienced opioid misuse for about 12 years. On the other hand, Feliza admitted that he was addicted to opioids for about 15 years. The outcomes align with the study by Reboussin et al. (2020), which revealed that exposure to cannabis during adolescence increases the risk of engaging in opioid misuse by 44.8%. Moreover, Tucker et al. (2020) showed that children with a history of opioid abuse were more likely to use opioids in their adolescent years. For some participants, their history of opioid misuse was so long that they could not accurately recall the exact time frame.

*“How long were you addicted to opioids?”* – Researcher

*“I would say 12 years. About 10 to 12 years, I guess. I don't remember exactly.”* – Druzo

It was also observed that 40% of the participants started using opioids to control physical pain and 20% began using opioids to cope with emotional trauma. This meant that a significant proportion of the participants did not aim to use the drugs for pleasure. However, the addictive nature of the drugs made the users dependent for long periods.

*“What was your reason for using opioids?”* – Researcher

*“Depression, grief, loneliness, sadness.”* – Kel

*“I'd say my original use of opiates was for pain management. That was my original use.”* – Mike



On the other hand, the findings in this study revealed that both genders had a high risk of using non-prescriptive drugs, as 80% of the participants (both genders) made use of non-prescription opioids, although more males (62.5%) made use of non-prescription opioids than females (37.5%). This could be attributed to the higher number of male participants (13/20) involved in the study and does not exactly represent a significant gender difference in opioid misuse. This finding is different from the results of the study by Silver & Hur (2020), which reported that opioids account for a 58% increase in opioid-related deaths among men. In addition, the study findings also contradict that of Hoopsick et al. (2021), which reported that 17.7% of opioid-related deaths occurred among African American males, while 5.4% of the deaths occurred among African American females.

The research also showed that both the African American and Latino participants faced social challenges such as limited access to prescribed drugs. About 55% of the participants revealed that they started using non-prescription opioids from the streets. This meant that they were unable to acquire quality prescriptive services from healthcare facilities. Some revealed that the use of these drugs was more of a social thing as they continued staying in locations where drug abuse was common. Moreover, they did not get help from the communities as there were no established strategies for controlling the problem.

*“Did you receive any help from the community at the time you were using an opioid?” –*  
Researcher

*“No.” – Batho*

*“Uh, no, it was more of a social thing. And a boredom thing, you know what I mean? And then it became like an everyday cycle for me.” – Kando*

Other participants such as Ali, Bobby Jo, Brum, Mike and Ortiz also complained about not receiving any community-based support to alleviate their opioid addiction. In this regard, it could be opined that the regions which such participants came from did not have suitable community agencies or initiatives to help prevent opioid misuse.

***Sub-Question 3: How do healthcare practitioners perceive the efficiency of opioid preventive practices on adult African American and Hispanic users?***

Rehabilitation centers were perceived to be ineffective in managing opioid addiction among 25% of the study participants.

*“I went to rehab. Um, once my mother found out what was going on, she stepped in with my children, and this has caused me to be in and out of jail and rehab.”* – Bobby Jo

*“When I first went to rehab to get off my prescription pills, I learned about the place from a friend because I was not aware of any of that stuff. Then everything else, I was forced to.”* – Amo

Bobby Jo revealed that he was involved in rehabilitation plans which were facilitated in correctional facilities. However, in the community, he did not attend any programs as he was not aware of them. It may mean that the rehabilitation centers in the community did not develop reliable measures for handling issues affecting their residents. The participants also revealed that they were not introduced to rehabilitation by healthcare workers. Mostly their friends and relatives suggested that they could be helped by certain agencies.

Overall, it was observed that current community strategies to address drug abuse are not sufficient. The observation revealed that strategies such as the use of medication and Pathways

counseling were only established to manage drug abuse issues. However, there were no specific effective ways of preventing the problem.

### **Summary**

This chapter provides a brief overview of the framework used to analyze the data and the themes developed based on the research questions and participant data. The themes were grouped into three sections: impact on health and wellness, influence of ethnicity, impact of age, gender, and ethnicity, and opioid management practices. The results section aligns with the theme section as it provides narrations related to the participants' data. Under the impact of opioids, it is shown that the drugs led to social isolation and increased tendency to go to jail. Age was shown to be a major factor in drug abuse. On the other hand, gender was not a significant issue. Ethnicity affected the participants as it subjected them to social problems such as limited accessibility to prescribed medications. The chapter also revealed that there were no suitable preventive measures for opioid usage in the population.

## CHAPTER FIVE: CONCLUSION

### **Overview**

The purpose of this study was to evaluate the experiences of African American and Latino adults regarding the impact of opioids, the effects of age, gender, and ethnicity, as well as the perception of preventive measures in the community. This section provides a discussion of the study findings. It also depicts the limitations and delimitations of the study as well as implications for practice. Lastly, the section provides recommendations that align with the study objectives.

### **Summary of Findings**

The study found opioid use had a major impact on the participants' social lives. It was noted that the participants had difficulty maintaining good relationships. This made them feel isolated as they no longer had friends or relatives in their lives. They were not able to control their emotions, thus leading to arguments most of the time. The study also revealed that a significant proportion (30%) of the participants had been to prison or jail. Using drugs made them prone to arrests as they were often found to be in possession of illegal substances. These findings are in line with the evidence from literature depicting that opioid addiction impairs cognitive function, social orientation and emotional control, making affected individuals likely to engage in crime, misunderstandings and job loss (Rogers et al., 2019; Leung et al., 2022). The findings also depicted that adolescents affected the use of opioids due to misinformation and social problems. It was revealed both men and women had similar reasons for using opioids, which differed from the evidence in literature that there is a higher occurrence of opioid misuse, addiction, and opioid-related deaths among males compared to females (Huhn et al., 2019; Silver & Hur, 2020; Hoopsick et al., 2021).

A significant reason for opioid addiction was pain management, as 40% of the participants revealed they had used the drugs for controlling pain. This aligns with the literature concerning pain management, as opioids are often prescribed to manage pain from physical trauma and chronic medical conditions, with addiction emerging as an undesired effect when not monitored properly (Quinlan & Cox, 2017; Wachholtz et al., 2022). In addition, it was shown that both African Americans and Latinos experienced social difficulties. For instance, their communities had insufficient strategies for preventing and managing opioid addiction. They also had difficulty accessing quality healthcare services as they were not always able to get prescriptive drugs to improve their pain management. These findings align with the perspective of the BARHII model, which depicts the socioeconomic challenges faced by African Americans and Latinos that predisposes them to substance abuse.

### **Discussion**

The Intersectionality model focused on how elements such as gender, sexual orientation and ethnicity affected a person's privilege or discrimination. It was shown that political, structural, and representational forms of society affected how people lived. The theory showed that ethnicity affects a person's risk of drug addiction. For instance, it revealed that minority communities tend to experience challenges in attaining quality healthcare services. In the study by Persmark et al. (2020), it was reported that in 32% of access measures, African Americans had a lower tendency of accessing quality care compared with Caucasians. Moreover, it was revealed that in 63% of access measures, Hispanics experienced difficulties in accessing quality care (Persmark et al., 2020). This research shares a similar perspective with Persmark et al. (2020) by depicting that African Americans and Latinos had higher likelihood of getting pain management drugs from illegal sources rather than from health facilities. In this study, about 55% of the participants

obtained their opioid drugs via illegal means. In effect, the findings show that individuals from minority groups, such as African Americans and Hispanics, tend to experience structural challenges such as reduced access to healthcare, compelling them to seek non-prescriptive drugs from other sources, which further compounds their addiction problems.

The BARHII Framework was developed to depict the association between social inequities and health status (Bay Area Regional Health Inequalities Initiative, 2010). It provides a perspective that shows the relationship between social problems (like low levels of education) and drug abuse. According to the model, race and ethnicity are the major causes of healthcare issues among minority groups. The model revealed that minority groups, like Latinos, were more likely to experience challenges such as low-income and poor housing, which increased their tendency of indulging in negative behaviors like substance abuse to cope mentally (Bay Area Regional Health Inequalities Initiative, 2010). This research study aligns with the perspective of the BARHII model, as it was observed that 60% of the participants in this study engaged in drug abuse, because they came from dysfunctional families. Hence, some of them may have experienced their parents, family members, peers and other individuals in their community make use of opioids inappropriately, while some participants lived in areas where access to quality drug prescription services was limited.

A study by Hoopsick et al. (2021) revealed that African Americans and Latinos had higher rates of mortality associated with opioids than Caucasians, due to inequalities in quality healthcare access. This perspective was confirmed by the findings in this research study, as it revealed that the African Americans and Latinos in this study also had similar challenges in accessing quality care. For instance, participants like Ali, Batho, and Bobby Jo were unable to obtain prescriptive drugs for their problems, which compelled them to access non-prescriptive drugs from the streets.

In addition, another study by Rogers et al. (2019) revealed that mood swings occur with drug addiction if individuals undergo a lapse in drug use. This can impair a patient's cognition, making them engage in unlawful activities. This aspect was supported by the findings in this study, which revealed the frequent occurrence of arguments, temper issues, and a tendency for the participants to break the law. For instance, Cali revealed that after he started engaging in drug abuse, it impeded his cognition and emotional control, which led to a decline in his memory, causing him to have bad grades and made him get into arguments frequently. Findings from other studies, such as that of Barry et al. (2019) showed that with the right strategy, patients can effectively adhere to nonpharmacological interventions used to manage opioid addiction. This is confirmed by the fact that the participants in the study seemed to respond positively in the Pathways counseling program, and some participants, like Amo and Kando had been clean for 12 months (a year) and 19 months respectively at the time of the study. Also, Brum revealed that his symptoms had begun to wear off, while Tony no longer experienced back aches that triggered his opioid addiction, and Kel clearly stated that the Pathways program was effective in controlling her addiction.

### **Divergence from Previous Research**

The Intersectionality Model revealed that gender is a major issue in opioid abuse. However, the study revealed both men and women had similar reasons for addiction. Both genders were observed to have similar experiences such as engagement in arguments and getting incarcerated. The study by Moazen-Zadeh et al. (2021) depicted that the use of opioids might improve mental health state by reducing pain and enhancing a sense of well-being. However, the findings in this study showed that the mental health of individuals is negatively affected by opioid use. It was observed that 40% of the addicts felt ashamed of using the drugs. Such a perspective indicates that opioid use has a negative impact on users' mental health. Marsh et al. (2018) reported that men

have higher prevalence of heroin and non-prescription opioid use than women. However, the findings in this study revealed that both genders had a high risk of using non-prescriptive drugs, as 80% of the participants (both genders) made use of non-prescription opioids, although more males (62.5%) made use of non-prescription opioids in comparison with females (37.5%). This could be attributed to the higher number of male participants (13/20) involved in the study. Certain female participants recorded lengthy years of addiction, such as Feliza, who had an addiction to non-prescription opioids for a period of 15 years, and Kel who was addicted to opioids for 12 years. Both women were among the participants with the longest duration of opioid addiction. It was also found that fentanyl was the most common opioid in Pennsylvania rather than heroin. Participants like Ali, Tonny, Bobby Jo, Cali and Mike disclosed their penchant for using fentanyl.

### **Implications**

#### **Theoretical**

The study found no relationship between gender and use of opioids among African American and Latino adults. Participants from both genders had long-term experiences of using opioids. Their reasons for using the opioids did not differ. For example, while Batho began to use opioids to control her social anxiety, Tonny aimed at controlling his back pain. This means both participants were involved in opioid use due to their underlying health conditions. The outcome indicates theories such as the Intersectionality Model and the BARHII theory could adjust the role of gender in opioid usage. The Intersectionality Model revealed women were affected by issues such as low pay which made it easier for them to engage in social vices such as drug abuse (Persmark et al., 2020). On the other hand, the BARHII model depicted that woman had different perceptions of pain, hence creating a difference in the way they used opioids when compared with



men (Bay Area Regional Health Inequalities Initiative, 2010). These results may show the need for the development of a new model that considers the effect of ethnicity, age, and other factors apart from gender in explaining the risks of opioid addiction. Furthermore, variations in the location of an area should be incorporated in the model to determine the type of opioids that are more commonly available to specific populations.

### **Empirical**

The study applied a qualitative approach to attain its findings. This approach was suitable as it provided a comprehensive understanding of the participants' experiences. The participants provided detailed information on how they started using the drugs, the impact of the drugs on their lives, and how management strategies did or did not help in handling their issue. For instance, Brum revealed that he began using opioids because of social influence. He narrated that he had used Percocet for two years and the resultant addiction often made him feel sick. He also revealed that he did not get assistance from the community. This portrays that the drug prompted a decline in his health and also hampered his social ties in the community. However, the approach is limited in terms of generalizability as the outcomes may not be used to explain experiences of similar populations in other settings. This is because the study only used 20 participants who made up a small sample of the target population. Moreover, the study was only carried out in a specific location in Pennsylvania. Research locations could be broadened across the region to provide a clearer picture of the opioid problem in the state.

### **Practical**

The study showed that there are little to no effective strategies that have been put in place in the community to improve prevention of opioid use in the areas. The participants revealed that they

did not get any assistance from the community. Moreover, it was shown that despite 20% of the participants engaging in community initiatives, they continued using the drugs, hence, resulting in many years of addiction. To address the challenges of opioid misuse, there is a need to implement health promotional programs such as educational campaigns aimed at enhancing the awareness and understanding of opioid misuse among the general population (Van Draanen et al., 2020). Such campaigns can serve as an avenue to increase public awareness about the dangers of synthetic opioids, especially Fentanyl, and the importance of prescription adherence. Campaigns targeting mental health management are also important, to empower individuals with knowledge on how best to cope with mental health conditions and emotional trauma without the use of non-prescriptive drugs. By disseminating accurate information, these campaigns can contribute to a more informed and vigilant society, ensuring a collective responsibility towards tackling the risks associated with opioid misuse.

Furthermore, healthcare agencies must adopt multifaceted strategies to address the opioid crisis. Improving access to comprehensive healthcare is important, by ensuring that individuals with injuries or chronic conditions receive timely and appropriate medical attention. It has been shown that enhancing access to non-opioid pain management alternatives, such as physical therapy and non-pharmacological interventions, can effectively alleviate pain while minimizing the risk of opioid dependence (Dowell et al., 2022). Additionally, healthcare agencies should prioritize the implementation of evidence-based pain management policies, including guidelines that emphasize the judicious use of opioids, risk assessment, and patient education to prevent misuse (Dowell et al., 2022). Collaborative efforts with mental health professionals are crucial, as mental health issues often coexist with opioid misuse. Integrating mental health screening and treatment within healthcare settings can help address the underlying factors that contribute to opioid addiction. The

government also has a crucial role to play in fostering a more equitable and inclusive approach to tackling opioid-related issues. Van Draanen et al. (2020) emphasized the necessity of developing measures that actively work towards eliminating social disparities between minority and majority ethnic groups. By addressing these social gaps, policymakers can contribute to creating an environment that is more supportive for all individuals struggling with opioid addiction, irrespective of their ethnic background. These actions will reduce the risk of engaging in opioid abuse among minority groups.

In addition, similarities between women and men's usage of opioids depict that social agencies may initiate similar strategies for both genders to reduce their risk of opioid abuse. Lastly, there is a need for law enforcement agencies to develop strategies to eliminate the availability of non-prescription opioids in the market, especially fentanyl, as they are a major source of opioid addiction among the minority groups. This can be done by developing strict policies that hinder the sale of opioids in areas with a high prevalence of opioid misuse and addiction (Menvar & Bejarano, 2004). For instance, policies that enhance regulatory oversight and regular audits of pharmaceutical distributors and retailers can be implemented to ensure strict adherence to prescription protocols. In addition, prescription monitoring programs can be established to track the distribution of opioids in order to identify patterns of over-prescription or diversion of opioid medications for illegal sales.

### **Delimitations and Limitations**

The study only focused on issues that were associated with its objectives. Therefore, issues that were outside the scope of the study were not examined. Moreover, the study only focused on Latino and African American adults. Participants from other ethnic groups were excluded. This

gives a limited understanding of how opioid use impacts health across a diverse range of ethnic backgrounds. In addition, the study excluded participants with no history of opioid misuse, which yields a limited understanding of the broader population's health impact. Also, the study relied on the subjective perception of the respondents, which may not fully capture objective health outcomes. The study focused on participants between 18 and 40 years, hence, no insight was attainable on how opioid use affects older or younger age groups. In addition, the study did not examine the effects of opioid use over time, hence, there is limited understanding of the long-term effects of opioid use on health.

### **Recommendations for Future Research**

Upon completion of the study, the researcher opined that future work in this regard could be aimed at evaluating other factors that may influence the risk of opioid use, such as socioeconomic status, mental health conditions, prescription practices, history of trauma (childhood trauma or adverse life events), peer influence, and geographical factors. Additionally, the researcher recommends the application of other theoretical frameworks in evaluating the health impact of opioids, as well as methods of controlling opioid misuse in a population. It was observed that the theoretical frameworks guided the researcher to understand the social aspects of opioid addiction. However, a novel healthcare model could enable future researchers to develop an in-depth understanding of the impact of opioids from a healthcare perspective (Bolshakova et al., 2019). Such novel model could also consider other demographic factors besides gender, age and ethnicity, that may significantly influence opioid misuse and addiction patterns. A quantitative approach is also suggested to be used in future research. It will help to understand the extent of the opioid problem in the Latino and African American populations. The approach can be used to compare the risks associated with opioid use between minority and majority groups in the United

States. Quantitative approaches are observed to provide an accurate view of social issues in the world. They provide objective data which can be communicated using numbers and statistics (Aguinis et al., 2019).

### **Summary**

This concluding section encapsulates the principal findings delineated in chapter four, offering a synthesis that integrates theoretical perspectives and empirical evidence. The exposition elucidates the congruence or divergence of observed outcomes with extant theoretical constructs and scholarly literature. The data indicate that ethnicity and age significantly influence opioid utilization within the studied demographic. In contrast, gender appears to exhibit no discernible impact on opioid consumption patterns. The methodological approach of the study reveals limitations in generalizability, given its sample size of 20 participants, which may not be representative of the broader population.

Contrary to the established theoretical frameworks, the research uncovers an absence of correlation between gender dynamics and opioid usage. The investigation further exposes a deficit in effective preventative measures to curb opioid misuse among the targeted cohort. The majority of participants identified their reliance on the Pathways program, underscoring a lack of alternative community interventions within their locale.

In light of these findings, the section concludes with a call for more extensive research to explore the multifaceted issue of opioid misuse. Future studies are encouraged to expand upon the limitations encountered, to develop comprehensive strategies that effectively address and mitigate the factors contributing to the misuse of opioids.

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## APPENDIX

### **Appendix 1: Institutional Review Board (IRB) Application**

The IRB application included key details about the research study being proposed. It also outlined the study's objectives, methodology, participant recruitment and selection process, potential risks and benefits for participants, data collection and analysis methods, and procedures for ensuring participant confidentiality and informed consent. In general, the application summary provided an overview of the research to help the IRB members understand the nature of the study and make an informed decision regarding its ethical and regulatory compliance. The application was approved after a series of recommendations and corrections.

Attached in subsequent pages is the approved consent form from the IRB.

## Consent

**Title of the Project:** Impacts of Opioids on Health and Ways to Improve the Addiction

**Principal Investigator:** Kennedy Alajemba, Doctoral Candidate, School of Health Sciences, Liberty University

### Invitation to be Part of a Research Study

You are invited to participate in the research. To participate, you must be between 18 and 40 years of age with a history of opioid use, a male of African American or Hispanic ethnicity, and actively receiving treatment at Pathways to Recovery Counseling and Education Services. Please note that participation in this research project is voluntary.

Kindly take your time to read the entire form and seek clarification on any issue of concern before deciding whether to take part in this research.

### What is the study about and why is it being done?

The purpose of the study is to describe the impact of opioids on male, African-American and Hispanic adults between the ages of 18 to 40 at Pathways to Recovery Counseling and Education Services in Hazleton, Pennsylvania.

### What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following:

1. Participate in an in-person interview. The interviews will take no more than 30 minutes. The interview's audio will be recorded.
2. Participate in a questionnaire. The questionnaire will take no more than 20 minutes. Questionnaire will be on a paper format and will be completed at the time of interview.
3. Be observed. The observations will take no more than an hour. The researcher will observe the participants' behaviors regarding opioid usage and physical effects of opioid on patients.

### How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include provision of strategies for controlling the opioid pandemic and improving health and care for the coming generations.

### What risks might you experience from being in this study?

The expected risks from participating in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

### How will personal information be protected?

The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records.

- Participant responses will be kept confidential by replacing names with pseudonyms.

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- Interviews will be conducted in a location where others will not easily overhear the conversation.
- Data will be stored on a password-locked computer and in a locked cabinet. After three years, all electronic records will be deleted, and all hardcopy records will be shredded.
- Recordings will be stored on a password-locked computer for three years and then erased. The researcher will have access to these recordings.

#### **How will you be compensated for being part of the study?**

Participants will be compensated for their time. Participants will receive refreshments upon completion of the study. Participants will not receive compensation if they did not successfully complete all tasks.

#### **Is study participation voluntary?**

Participation in this study is voluntary. Your decision whether to participate will not affect your current or future relations with Liberty University or Pathways to Recovery Counseling and Education Services. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

#### **What should you do if you decide to withdraw from the study?**

If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you will be destroyed immediately and will not be included in this study.

#### **Whom do you contact if you have questions or concerns about the study?**

The researcher conducting this study is Kennedy Alajemba. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact him at [REDACTED] or [REDACTED]. You may also contact the researcher's faculty sponsor, Dr. Kala Dixon, at [REDACTED].

#### **Whom do you contact if you have questions about your rights as a research participant?**

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the IRB. Our physical address is Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA, 24515; our phone number is 434-592-5530, and our email address is [isirb@liberty.edu](mailto:isirb@liberty.edu).

*Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.*

#### **Your Consent**

By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will be given a copy of this document for your records. The researcher will keep a copy with the study records. If you have any questions about the study