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## Medication Nonadherence Among African American Male Psychiatric Patients: Healthcare Providers' Perspectives

Felix O. Agoye  
*Walden University*

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# Walden University

College of Health Sciences

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Felix O. Agoye

has been found to be complete and satisfactory in all respects,  
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Walden University  
2020

Abstract

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by

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MPH, Walden University, 2013

BA/BS, Chicago State University, 2010

Dissertation Proposal Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy in Health Services

Walden University

June 2020

## Abstract

African American men show less adherence toward maintenance pharmacotherapy for psychiatric disorders than Caucasian men. However, studies that specifically investigated the sociodemographic determinants of medication nonadherence in African American psychiatric patients based on healthcare providers' perspectives are limited. Therefore, this study explored the viewpoints of healthcare workers in a Chicago-area hospital network about medication nonadherence among psychiatric African American male patients. This qualitative case-study is guided by the health-communication model and theory of planned behavior. Interview sessions were conducted with providers who met the inclusion criteria and NVivo 11 was used to store and organize the data in order to answer the research questions. Of the 40 participants, 55% mentioned that older U.S. male psychiatric patients are more nonadherent. Furthermore, 80% of participants noted that the presence of a significant partner serving as an emotional-support system induces patients to avoid medication nonadherence. Study findings revealed that it is important for providers to especially cater to African American patients, due to inherent risk factors. Although African American male psychiatric patients may be culturally challenged by medication nonadherence, the ability to manage their condition, recover fully, and lead normal lives is possible. This study promotes social change by offering focused practices for training and retraining of healthcare workers who provide care to African American male psychiatric patients. Study results represent a potential impact for positive social change by providing evidence that improving providers' perceptions of patients is an additional approach to improving overall patient care.

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## Dedication

I dedicate this work to the memory of my late Dad and Mom (Pa Clement Giwa Agoye and Abigael Olorunferan Agoye) whose determination and courage were the foundation for my life journey. To my lovely wife, Susannah, and obedient children, Debra, Samuel, and Dorcas. Although my expectations were so high coupled with your school demands, you were always by my side, and in some instances, forewent some personal essential needs to enable me to stay focused on this academic journey. I trust that it has inspired you all to understand that there is nothing too difficult to achieve with determination. Thank you for the love, support, and encouragement that you all demonstrated during the challenging times of this journey. To my colleagues and supervisors at BRIA, and younger brother Olusola Agoye of Foatex Health Inc., thank you for the patience and understanding regarding the time I needed to take from work to see this study through and achieve my goals.

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## Table of Contents

LIST OF TABLES .....	vi
CHAPTER 1: INTRODUCTION TO THE STUDY .....	1
Background .....	3
Problem Statement .....	5
Purpose of the Study .....	7
Nature of the Study .....	8
Research Questions .....	10
Conceptual Framework .....	11
Operational Definitions .....	11
Significance of the Study .....	12
Assumptions .....	13
Limitations .....	13
Scope and Delimitations .....	13
Summary .....	14
CHAPTER 2: LITERATURE REVIEW .....	15



Databases and Search Strategies .....	16
Factors Affecting Nonadherence .....	16
Socioeconomic Factors .....	17
Healthcare System .....	17
Healthcare Providers' Viewpoints .....	19
Overview of African American Male Psychiatric Patients.....	21
Condition and Therapy .....	23
Patients.....	23
Measuring Adherence and Healthcare Providers' Perspectives .....	28
Consequences of Nonadherence .....	29
Medication Nonadherence in African American Psychiatric Patients.....	31
Conceptual Framework.....	34
Health Communication Model (HCM).....	35
The Theory of Planned Behavior.....	35
Horne's Theoretical Model.....	36
Implications of Social Change on Medication Nonadherence.....	37

Summary .....	39
<b>CHAPTER 3: RESEARCH METHOD .....</b>	<b>40</b>
Purpose.....	40
Research Design and Rationale .....	41
Case Study Research.....	41
Role of the Researcher .....	43
Instrumentation .....	43
Psychiatric Healthcare Providers.....	45
Sampling Method and Participant Size.....	45
Recruitment Strategy .....	46
Sampling Strategy and Sample Size Estimation.....	47
Data Analysis Tool .....	48
Data Analysis Plan.....	48
Ethical Considerations and Issues of Trustworthiness .....	51
Summary .....	52
<b>CHAPTER 4: RESULTS .....</b>	<b>53</b>

Research Setting .....	53
Participant Demographics.....	55
Data Collection .....	56
Data Analysis.....	56
Ethical Concerns and Issues of Trustworthiness .....	58
Results Presentation.....	59
Summary .....	68
<b>CHAPTER 5: DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS .....</b>	<b>69</b>
Interpretation of the Findings .....	70
Psychiatric Patients and Medication Nonadherence.....	70
Uniqueness of African American Male Psychiatric Patients.....	72
Socioeconomic Factors and Medication Nonadherence.....	74
Key Findings.....	77
Limitations of the Study .....	78
Recommendations.....	79
Implications .....	80

Conclusion .....	81
REFERENCES .....	81
APPENDIX A: INTERVIEW QUESTIONS .....	98
APPENDIX B: INTERVIEW PROTOCOL.....	100
APPENDIX C: IRB APPROVAL LETTER .....	102
APPENDIX D: RECRUITMENT E-MAIL .....	103

## **List of Tables**

Table 1 Profile of Participants .....	55
Table 2 Frequency Table of Top 10 Keywords/Terms for RQ1.....	59
Table 3 Age as a Determinant of Medication Nonadherence .....	63
Table 4 Marital Status as a Determinant of Medication Nonadherence .....	65
Table 5 Family Income as a Determinant of Medication Nonadherence .....	66

## Chapter 1: Introduction to the Study

This study explored how healthcare providers (HCPs) perceive demographic and socioeconomic factors and characteristics that influence medication nonadherence among African American male psychiatric patients. Medication nonadherence is a pressing problem in healthcare in general and involves the treatment of psychiatric patients in particular. Therefore, studies like this are important to ensuring overall health outcomes involving African Americans. In a 2005 study involving patients in the United States, the category of patients with recurring psychiatric disorders such as depression and schizophrenia, 70% demonstrated noncompliance and nonadherence toward their medications (Baldessarini, Henk, Sklar, Chang, & Leahy, 2005). The inability of patients with psychiatric disorders to be compliant with medications can create adverse implications for their health and personal well-being as well as poor health outcomes (Lepage, Bodnar, Joobar, & Malla, 2010).

Poor adherence to a medication regimen has important implications for therapy effectiveness and an overall improvement in the positive health outcomes of patients. Bazargan et al. (2017) said that 20 to 30% of prescribed medications are not filled by African American psychiatric patients. Furthermore, 50% of the medications that are filled are not taken as prescribed by the provider. Medication nonadherence is common among psychiatric patients and involves not filling or refilling prescriptions, medication duplication, taking the wrong dosage or amount, missing days, poor timing, or not taking

medication according to the physicians' orders (Lacro, Dunn, Dolder, Leckband, & Jeste, 2002).

Moreover, nonadherence can affect employment status, quality of relationships, income capacity, and sense of social responsibility (McGuire & Miranda, 2008).

Medication nonadherence among African American male psychiatric patients is disproportionately higher than in other populations (Braverman & Dedier, 2009). The nonadherence rate of African American male psychiatric patients' in the United States stands at 41%, compared to 21% among Caucasian psychiatric patients (McKirnan & Jones, 2014). These statistics suggest the crucial importance of examining determinants of medication nonadherence in psychiatric populations such as African American male patients.

In addition, understanding HCPs' perspectives and attitudes is essential to foster an effective therapeutic environment for patients. An HCP is an individual who offers preventive, curative, promotional, or rehabilitative health care services (Burgess et al., 2017). HCPs' perspectives or viewpoints affect service delivery and have the potential to impact effective patient interactions (Arnetz et al., 2015). Through adequate patient information and the appropriate perspectives of healthcare providers regarding patient needs, HCPs may be able to provide better care for patients. When HCPs have sound perspectives involving their patients' conditions, including necessary cultural competence, an atmosphere exists to offer interventions that improve medication

compliance and establish the appropriate rate of attention or care (Greene, Hibbard, Sacks, Overton, & Parrotta, 2015).

Improved health outcomes emerge when engagement between HCPs and patients is established with the appropriate perspectives and attitudes. Healthcare delivery depends on HCPs' workforce performance (Panda, Thakur, & Zodpey, 2016). Hence, understanding the viewpoints of HCPs involving medication nonadherence among African American male psychiatric patients is essential to improve overall healthcare outcomes, enhance skills, and establish competence. In particular, attitudes, perspectives, viewpoints, and behaviors of HCPs are a source of health disparities (W. J. Hall et al., 2015). Positive attitudes toward patients can influence HCPs' level of care or service to patients and can cause implicit bias and healthcare outcomes (W. J. Hall et al., 2015). Empirical evidence suggests that HCPs' perceptions can impede behavioral evidence and the level of care provided to patients, which can ultimately affect the level of care. Thus, understanding the perceptions of HCPs is necessary to introduce positive social change.

### **Background**

Various factors can affect nonadherence to medications in various populations, and psychiatric populations in particular. HCPs' understanding of these factors can help break down major racial barriers that tend to impede healthcare provisions. African American patients often report provider bias and inequality of healthcare delivery (S. Taylor, Abramowitz, & McKay, 2012). Therefore, investigating provider perceptions is an expedient way to study socioeconomic factors that affect medication nonadherence in



this population. According to literature, factors such as patient attitude toward treatment, the seriousness of health condition, lack of trust in services provided, poor memory, and use of alternative therapeutic approaches, such as religious interventions, are of paramount importance in influencing medication nonadherence (Meichenbaum & Turk, 1987). However, demographic and socioeconomic characteristics are also essential. HCPs who take care of African American male psychiatric patients need to be evaluated to understand their perspectives and attitudes toward their patients using a holistic scale. It is important for HCPs to truly understand these factors clearly so they can provide adequate care.

It is not clear if HCPs identify psychiatric patients through stigmatization, labels, tags, discrimination, and other such factors; social and demographic elements are important determinants of medication nonadherence in populations such as African American male psychiatric patients. Thus, understanding the perspectives, viewpoints, and attitudes of HCPs is crucial to providing adequate healthcare services to African American male psychiatric patients and can help institute changes for these patients. Irrespective of the demography or ethnicity of patients, knowledge of HCPs' viewpoints will help define the quality of care being provided, which in turn may increase the pressure on decision-makers to promote better working conditions for HCPs and higher recovery rates for patients.

Although this subject of medication nonadherence has not been widely studied, attitudes, perspectives, and viewpoints of HCPs influence how they attend to patient

needs, with a corresponding relationship with treatment decisions, treatment nonadherence, and patient health outcomes (W. J. Hall et al., 2015). When HCPs hold negative viewpoints or are biased toward a patient, poor treatment may result, causing stress and avoidance of care, mistrust of the healthcare system, and nonadherence to medication among patients (Phelan et al., 2015). Also, negative viewpoints and stigma are major barriers to the treatment of psychiatric patients (Latalova, Kamaradova, & Prasko, 2014). Therefore, evaluating HCPs' perspectives or viewpoints about patient needs is worthy of scientific study.

### **Problem Statement**

A gap exists regarding understanding the quality of healthcare services and medication nonadherence among African American psychiatric patients. The relationship among race, treatment attitudes, and medication nonadherence of African American male psychiatric patients is largely unknown. Breaking down major racial barriers that tend to impede health care provision in African American psychiatric male patients is important. Little is known about racial variations in social and demographic factors that lead to medication nonadherence among psychiatric patients. Despite huge healthcare costs for psychiatric patients, medication nonadherence persists as a problem that needs to be investigated, especially among African American male psychiatric patients.

Providers continue to provide care and services to patients, yet no measures target improving medication nonadherence for African American male patients, and African American patients often report provider bias and inequality in health care delivery.

Therefore, a study is needed to evaluate the perception of these providers (Lacro et al., 2002). A detailed study is necessary to elucidate the perspectives or viewpoints of HCPs regarding medication nonadherence for African American male psychiatric patients using select demographic and socioeconomic characteristics.

Although medication nonadherence is high among African American male psychiatric patients, perceptions of HCPs toward them have been largely unknown. Little is known about racial variations in social and demographic factors that lead to medication nonadherence among psychiatric patients. Wrong illness perceptions of patients' needs by providers are likely to affect patient care. Therefore, understand the true situation of patient requirements with accurate HCP perceptions plays a vital role in overall health outcomes. Furthermore, provider perceptions toward these patients remains a neglected issue in research. Therefore, the perceptions, knowledge, and attitudes of providers toward African American male psychiatric patients are not known and need to be examined.

Patients' adherence to medication is established as patients leave 50, 70, 90, or 100% gaps in their medication levels (K. C. Lee, 2013). Increased healthcare costs can lead to poor health outcomes (K. C. Lee, 2013). When patients do not comply with medication regimens, either by discontinuing or failing to follow medication instructions, the provision of seamless healthcare is impeded and health declines. Therefore, with each patient's prescription, HCPs need to make concerted efforts to ensure respective patients understand the importance of medication compliance. The underlying factors and

impeding obstacles involved with provider viewpoints may play a huge role in solving this healthcare problem.

Providers can prescribe medications but cannot assure patients will comply with drug instructions. For that reason, HCP perspectives need to be investigated to understand how and why patients do not adhere to medication instructions. Sociodemographic variables such as patient age, race, level of education, and marital status align with medication nonadherence in various populations (Jeon-Slaughter, 2012; Krousel-Wood, Muntner, Islam, Morisky, & Webber, 2009). Therefore, in this research, demographic and socioeconomic characteristics were gross family income, marital status, and age.

### **Purpose of the Study**

The purpose of this study was to explore the perspectives or viewpoints of HCPs involving medication nonadherence among African American male psychiatric patients using gross family income, marital status, and age as sociodemographic factors in a Chicago-area hospital network. Five major factors influence medication adherence: patients themselves, medication type, HCPs, the healthcare system, and socioeconomic factors (S. Q. Lee et al., 2018). In the present study, I investigated provider perceptions and socioeconomic factors.

This study explored perceptions of HCPs to help determine why age, marital status, and gross family income can impact medication nonadherence among African American male psychiatric patients. This research identified how attitudes and beliefs of

caregivers influence the level of medication nonadherence among African American psychiatric male patients. Identification of these determinants is important and necessary to provide mechanistic explanations and suggest possible public health policies and strategies that address the issue in this particular ethnic group.

### **Nature of the Study**

This study was designed with a qualitative research methodology approach. In particular, I used a qualitative case study methodology to determine how HCPs view demographic and socioeconomic characteristics as determinants of medication nonadherence among African American male psychiatric patients. Qualitative case studies provide a comprehensive approach to evaluate complex issues and provide empirical and scientific rigor rather than a straight statistical correlation (Baskarada, 2014). I conducted this dissertation using a purposeful sampling technique. In using the criterion sampling method of purposeful sampling, I conducted interviews with HCPs who met the inclusion criteria.

The main instrument in this dissertation was one-on-one interviews with HCPs who met the inclusion criteria. The interviews aimed to seek responses from HCPs and obtain their viewpoints regarding demographic and socioeconomic characteristics that influence medication adherence (see Appendix A).

In using a criterion sampling method for purposeful sampling, the chosen criteria were HCPs who were experienced in providing healthcare services to African American

male psychiatric patients in a Chicago-area hospital network. Study participants had at least 2 years of direct nursing experience with African American male psychiatric patients. Participants held current licenses. Study participants included four distinct provider groups: registered nurses, nurse practitioners, therapists/counselors, and physicians

Because data cannot be collected from everybody or the entire given population for a research study, Morse (2000) suggested interviews with five to 50 participants would support an adequate qualitative study. G. A. Bowen (2008) said that a minimum of 10 interviews should be sufficient to achieve saturation. Forty participant interviews were conducted before saturation was achieved in this study. Data accrued from 40 participants who met the inclusion criteria and all 40 participants' interview data were analyzed to answer the research questions.

Using a qualitative research methodology (semistructured interviews with HCPs), I explored the perspectives and viewpoints of HCPs. An HCP is an individual who offers preventive, curative, promotional, or rehabilitative healthcare services (Burgess et al., 2017). The target population for this research was providers who offer services to improve the mental health of individuals or treat psychiatric illnesses in a Chicago-area hospital network. Accordingly, HCPs who participated in interviews in this study included doctors, nurses, psychiatrists, clinical psychologists, clinical social workers, psychiatric mental health nurse practitioners, mental health counselors, psychiatric care managers, or clinical social workers authorized to offer psychiatric health care, defined

by law. Although the scope and practices of these professionals differed, the identified HCPs in these roles all provided healthcare services to African American male psychiatric patients.

### **Research Questions**

In this qualitative case study, I evaluated HCPs' perspectives and viewpoints to understand factors that influence medication nonadherence among African American male psychiatric patients. In particular, I investigated gross family income, marital status, and age from HCPs' perspectives. I interviewed eligible HCPs who met the study inclusion criteria to elucidate responses to answer the research questions (see Appendix A). The specific research questions follow:

*RQ1:* What are the most important determinants of medication nonadherence among African American male psychiatric patients according to HCPs in a Chicago-area hospital network?

*RQ2:* According to HCPs in a Chicago-area hospital network, how does age determine medication nonadherence among African American male psychiatric patients?

*RQ3:* According to HCPs in a Chicago-area hospital network, how does marital status determine medication nonadherence among African American male psychiatric patients?

*RQ4:* According to HCPs in a Chicago-area hospital network, how does socioeconomic status based on gross family income determine medication nonadherence among African American male psychiatric patients?

### **Conceptual Framework**

Outcome expectations and self-efficacy empirical models based on social-cognitive theory formed the conceptual framework to conduct this study. Of the several outcome expectations and self-efficacy empirical models, I used the theory of reasoned action and theory of planned behavior to systematically examine the various determinants of medication nonadherence for African American male psychiatric patients. This framework helps define the support needed to adhere to prescribed medication to strengthen patients' intentions and ultimate actions to adhere to the prescribed therapy.

### **Operational Definitions**

*Medication nonadherence:* Patients failing to take their medications as prescribed.

*Self-efficacy:* The level of self-confidence and self-reliance of patients to adhere to medication regimes prescribed by HCPs (Zygmunt, Olfson, Boyer, & Mechanic, 2002).

*Social-cognitive theory:* The theoretical perspective in which learning by observing others is the focus of study. Social-cognitive theory is grounded in several basic assumptions. One is that people can learn by observing others. Learners can acquire new behaviors and knowledge by simply observing a model (Ajzen & Fishbein, 1980).



*Psychiatric patients:* Patients suffering from mental ailments or psychological abnormalities such as bipolar patients (Morisky, Ang, Krousel-Wood, & Ward, 2008). In this study, psychiatric patients are people experiencing disturbances or abnormalities in their mental systems.

### **Significance of the Study**

This research was characterized by exploring how HCPs perceive demographic and socioeconomic characteristics as determinants of medication nonadherence among African American male psychiatric patients. HCPs need to identify and understand these variations to proffer the appropriate treatment regimen to accommodate racial disparities. This study helped explore how HCPs perceive African American male psychiatric patients and understand barriers or myths that impede treatment to ensure medication adherence, as well as avenues to eliminate existing racial barriers.

Understanding the perspectives or viewpoints of HCPs can allow for a better understanding of cases of substandard healthcare delivery, which can lead the federal government to improve engagement practices in healthcare institutions. This study is important in thoroughly examining the issue of medication nonadherence and identifying the predominant factors that affect adherence among male African American psychiatric patients. Some persistent healthcare-services issues in the African American community in general and for African American men, in particular, are drug abuse and related psychiatric issues.

### **Assumptions**

This qualitative case study had two assumptions. First, I assumed African American male psychiatric patients had easy access to required medical amenities and help but hold higher rates of medication nonadherence compared patients in other racial groups. The last assumption was that the participants who were interviewed for this study provided responses that are honest, truthful, accurate, and useful to answer the research questions raised in this study.

### **Limitations**

This qualitative research is limited in scope because it primarily focused on information provided by HCPs in a Chicago-area hospital network. This study is limited to the interview responses provided by participants who met the inclusion criteria to provide their perspectives or viewpoints on African American male psychiatric patients. Also, because this study involves only African American patients, social factors associated with medication-nonadherence determinants in other racial groups were not explored.

### **Scope and Delimitations**

Delimitations are factors the researcher can control to narrow the range of the study. This study included only HCPs who met the inclusion criteria for healthcare delivery to African American male psychiatric patients. I conducted this study with HCPs through one-on-one interviews only in a Chicago-area hospital network with the primary

focus of African American male psychiatric patients. HCPs from other hospital network outside Chicago axis were not included. Although inclusion of other area hospital networks could have added credibility to this study, the intent of this study was to limit the scope to a single Chicago-area hospital network.

### **Summary**

Chapter 1 included a background introduction to medication nonadherence as a public health issue in the general population of the United States and African American male psychiatric patients in particular. The chapter included the statement of the problem and the nature of the study. I mentioned the research questions, the purpose of the study, and the conceptual framework. I also described operational definitions to emphasize the public health significance of the study. Further, I provided the scope and limitations of the study.

Chapter 2 provides a comprehensive review of the literature related to the research. In Chapter 3, I describe the methodology used for the study. Chapter 4 includes the results from the interviews, and in Chapter 5, I interpret those results, along with my conclusions and recommendations for future study and practice.

## Chapter 2: Literature Review

In Chapter 2, I provide a critical review of the literature related to the study.

Medication nonadherence is a prevalent and costly healthcare issue in chronic disease patients in general and psychiatric patients in particular. Few studies described the extent of this pressing public health problem in minority populations such as male African American psychiatric patients.

Nonadherence to medication is a multifaceted challenge linked with the therapeutic relationship between medical professionals and patients, medications, and patients and their conditions, which may greatly impede the maintenance of sound health. Medical professionals contribute to nonadherence through failures to prescribe simple routines, explain the advantages and side effects of medications, and consider patients' lifestyles or medication costs. Also, health professionals and patients mentioned forgetfulness, the existence of other priorities, decisions to omit other doses, deficiency of information, and other emotional considerations such as psychological issues that emanate from medication nonadherence. Supervision by medical trustees in situations of patients' absence of insight is a major factor in adherence (Zygmunt et al., 2002).

Nonadherence to psychiatric treatment management weakens treatment-management effectiveness, increases the risk of setbacks, and can lead to damaging results because of the inability to maintain proper health status (Bulloch & Patten, 2010). Healthcare professionals previously resorted to educational programs, family therapeutic programs, and community-based measures to successfully enhance adherence (Zygmunt et al., 2002). The extent of this pressing public health problem has been understudied

among minority populations such as male African American psychiatric patients, with limited literature discussing nonadherence.

In this chapter, after first providing the search strategies and databases, I present a survey of literature related to established or hypothesized determinants of medication nonadherence. Then, I describe the theoretical foundation guiding the study and critically review the context of medication nonadherence among psychiatric populations. This chapter concludes by identifying a knowledge gap regarding the determinants of medication nonadherence among African American male psychiatric patients.

### **Databases and Search Strategies**

In searching for the relevant literature for the study, I used the following databases: EBSCOhost, PsycINFO, Google Scholar, ScienceDirect, ProQuest Central, and PubMed. I used the following keywords and phrases: *medication nonadherence*, *perceptions*, *psychiatric patients*, *African American men*, *healthcare providers*, and *healthcare viewpoints*. The various determinants of medication nonadherence can be categorized as socioeconomic factors, patient factors, healthcare-system factors, therapy factors, and condition factors (World Health Organization [WHO], 2003). Next, I survey the various dimensions and determinants of medication nonadherence.

### **Factors Affecting Nonadherence**

The five dimensions of nonadherence for medications are socioeconomic factors, the healthcare system, patient condition, therapy, and patient (WHO, 2003). I classify

each of those conditions in the context of medication adherence among African American male psychiatric patients.

### **Socioeconomic Factors**

Due to the stereotypical image of psychological issues among African Americans, patients may feel embarrassed or ashamed of adhering to medication routines, treatments, and therapies. However, adherent patients encounter some levels of social support (Maguire, Hughes, & McElnay, 2008). This social support is not sufficiently motivating. Instead, sympathy from the community creates further psychological issues for patients. Particularly among the populations that were the concentration of this study, discussing ones' health issues to gain social support may be culturally unthinkable. Furthermore, patients may expect society will see that they have psychological disorders because of having financial or personal issues and stress.

### **Healthcare System**

The frequency of dosage taken by an individual patient over a specifically prescribed period determines the percentage rate of medication. Some HCPs described this rate as the number of medications or pills taken in a day (Burnett-Zeigler et al., 2014). Persistence involves the continuity of taking one medication for a specific period and is the type of medicated therapy used in the treatment of patients with chronic diseases (E. M. Williams et al., 2014). The level of adherence is very high in patients suffering from acute diseases compared to those with chronic diseases; the fall in adherence in patients with chronic diseases could be easily observed after continuous

treatments of 6 months (E. M. Williams et al., 2014). A problem observed in the United States and the UK provides an example: 50% of patients continued statins for 6 months whereas 30 to 40% continued for 1 year (E. M. Williams et al., 2014).

Determination of patient adherence to antihypertensive medications in outpatient settings is an essential initial step for clinicians in understanding the effectiveness of the medicines they recommend, recognizing obstructions to treatment, and enhancing psychological well-being. Hawkshead and Krousel-Wood (2007) supported the use of short self-report measures, such as the Morisky Medication Adherence Scale (MMAS), to provide data on components influencing adherence that are valuable in clinical settings, such as distraction and medication side effects. The relationship between the MMAS and filling medication was not without problems, perhaps due to the weaknesses of self-report measures and the powerlessness of pharmacies to provide information that assesses the subtleties of medication-taking behavior (Kim, Han, Hill, Rose, & Roary, 2003). The relationship of the MMAS with uncontrolled psychological-disorder preservation and the genuine relationship between low adherence and poor mental health is likely more prevalent than reported (Kim et al., 2003).

Several investigators observed the influence of pharmacist interventions on patients' adherence to medications. Seven investigations showed a positive influence, whereas five showed no effective influence between control groups and tested groups (Hattingh, Scahill, Fowler, & Wheeler, 2016). Further, eight types of researchers observed a negative and depressive aspect from the intervention of the pharmacist on the patient (Hattingh et al., 2016). Literature noted that researchers worked to observe and

study psychological functions such as mood disorders. Another six studies of those reported showed no statistical change in adherence and depressive symptoms (Hattingh et al., 2016). In previous research, Guillaumie et al. (2015) observed and reported a variable improvement, though not very significant, when pharmacists provided information to patients. Four studies conducted by Guillaumie et al. showed improvement in adherence and the earlier symptoms of patients. Another disclosed aspect of pharmacists' intervention was an improvement in patients' drug-related knowledge (Guillaumie et al., 2015).

In another study, researchers also conducted conversations with patients two-third of the time they issued prescriptions (Conn, Enriquez, Ruppap, & Chan. 2014). When pharmacists provide medications, they have a clear opportunity to communicate pharmaceutical experience and advice on the drugs prescribed by physicians. General communication involves patients' concerns such as the side effects of the drugs, the interaction between drugs, and a cost comparison. However, pharmacists do not tend to indulge in deeper talk about expectations, understandings, and patients' satisfaction levels (Horne et al., 2013). Steps to build the formal communication skills of pharmacists such as language, style, and supportive talks may help create a bridge to patients, rendering the collaboration more like a partnership than a paternalistic approach (Stempleman, Decker, Rollock, Casillas, & Brands, 2014).

### **Healthcare Providers' Viewpoints**

HCPs aim to provide services that improve patients' health, longevity, and quality of life through the provision of patient-centered care, without bias or hesitation.



However, in doing so, it is imperative to eliminate HCPs' behaviors that discriminate against their patients (Phelan et al., 2015). HCPs have an important role in providing effective treatment regimens for patients. When HCPs perform at their optimum level, they accelerate patient recovery and improve patient satisfaction (Tsai, Orav, & Jha, 2015). In particular, attitudes, perspectives or viewpoints, and behaviors of HCPs have been a source of health disparity (W. J. Hall et al., 2015). Positive attitudes toward patients can influence HCPs' level of care or service to patients and can cause implicit bias and health care outcomes, if not properly managed (W. J. Hall et al., 2015).

HCPs' performance toward patient recovery is one of the key metrics of patient satisfaction. Although this topic of medication nonadherence among African American male psychiatric patients has been studied, researchers showed that perspectives or viewpoints of workers induced how HCPs attend to patients' needs, with a corresponding relationship to treatment decisions, treatment adherence, and patient health outcomes.

The level of stigma, stereotype, and other societal classifications by HCPs toward patients impacts the level of care provided to patients (Phelan et al., 2015). When HCPs hold negative perspectives, viewpoints, or bias toward patients, they may provide poor treatment that can cause stress and avoidance of care, mistrust of the health care system, and poor adherence among patients (Phelan et al., 2015). Hence, evaluating HCPs' perspectives or viewpoints about patient needs is worthy of scientific study.

African American patients do not trust the health care system (Boulware, Cooper, Ratner, LaVeist, & Powe, 2016). In cases where divergent cultural experiences exist between patients and care providers, understanding of social and demographic factors is

essential to enhance patient care and accelerate patient recovery. Of particular mention, people of color and minority racial groups have reported cases of health disparity and lesser health outcomes due to HCP bias or negative perspectives or viewpoints (W. J. Hall et al., 2015). HCPs may harbor attitudes and behaviors that hinder equal health care access to all patients, irrespective of race. HCPs' perspectives or viewpoints are often activated by instinct, based on implicit factors, and can influence behavior without conscious volition, thereby impeding appropriate health care delivery (W. J. Hall et al., 2015). Thus, HCPs' perspectives or viewpoints may play a vital role in medication nonadherence for African American male psychiatric patients evaluated in this study.

### **Overview of African American Male Psychiatric Patients**

African American male psychiatric patients have an average age of 41 years and tend to be unemployed (Hudson, Eaton, Banks, Sewell, & Neighbors, 2018). This group of patients also tend to be unmarried and never married. Patients in this group mentioned that mistrust of the health care system and stereotypes or stigma contribute to their medication nonadherence or lack of desire to seek treatment. Coupled with certain prejudicial beliefs and sentiments about mental illness, these factors hinder these patients from seeking help (Hudson et al., 2018). Only 14% of participants in the Hudson et al. (2018) study agreed they were consistent and compliant in their medication use, rendering medication nonadherence in African American male patients a strong public health problem.

With 20% of African Americans more likely to experience serious mental health problems than the general population, the propensity to remove barriers that inhibit

adequate health care should be strengthened (McKirnan et al., 2016). HCPs would be more effective if they avoid negative viewpoints and stigmatization of patients through biased perspectives. Social determinants can affect medication nonadherence in psychiatric patients; hence, HCPs need to have true perspectives or viewpoints and opinions to offer the necessary treatment and care. In the present study, social determinants were evaluated as age, gross family income, and marital status.

Psychiatric patients who are married are more susceptible to be compliant with their medication protocol than patients who are not married (W. J. Hall et al., 2015). Marital status as a social factor can affect medication nonadherence. Hence, knowledge of these factors is imperative for HCPs, enabling them to adopt measures that are effective in eradicating medication nonadherence for psychiatric patients.

As previously discussed, cultural variations and social factors often induce how psychiatric patients behave. The act of seeking help for mental disorders is often viewed as a sign of weakness, especially for African American men (Murray et al., 2006). HCPs are tasked with high responsibility to encourage medication compliance for these patients. Understanding the racial and cultural variations particular to African American male psychiatric male patients is crucial to seeking improved medication adherence. The efforts and influence of HCPs are crucial to the identification and treatment of mental disorders in African American patients to enhance medication compliance.

### **Condition and Therapy**

Reduced concern about medications impacts the incidence of adherence as well (Horne et al., 2013). Horne et al. (2013) conducted a meta-analysis of the literature, demonstrating that individuals with fewer worries about their treatment have better levels of adherence to treatment. Furthermore, health-minded care suppliers need to examine social worries about medicines related to the psychological well-being of patients from ethnic-minority populaces. Concerns regarding the side effects of medication, for example, loss of sexual activity or inclinations to use customary remedies, may offer one clarification for the reduced level of medication adherence among African Americans suffering from psychological disorders.

Many HCPs have prescribed complex medication routines and then failed to explain their advantages, creating the lowest level of adherence in patients; these HCPs also do not consider patients' lifestyle, which may also serve as a barrier to adherence. Improved communication between the HCP and the patient could result in greater trust in their relationship (Sin & DiMatteo, 2014). Other factors, such as social support, weather, poverty, migration, homelessness, and socioeconomic status also play a vital role in helping and creating barriers to adherence (Murray et al., 2006).

### **Patients**

The ability to achieve patients' medication self-efficacy emphatically affects adherence to psychological or antihypertensive medications (Schoenthaler, Ogedegbe, & Allegrante, 2009; Warren-Findlow, Seymour, & Brunner Huber, 2012). Patients'

adherence level and intensity tend to improve if they are psychologically ready to take medications under a variety of circumstances and environments without insecurities. Adherence to medication emerged in other diseases and physical ailments such as rheumatoid joint inflammation, depression, and hypertension in African American patients (Kressin et al., 2007).

Anxiety is a major determinant of adherence to lifestyle (Serour, Alqhenaei, Al-Saqabi, Mustafa, & Ben-Nakhi, 2007). When patients visit their HCP, the HCP prescribes some medication aimed to become part of the routine of that patient, dubbed the medication regimen (Nieuwlaat et al., 2014). Most HCPs use the term adherence rather than compliance to express the HCP's medication order passively, showing that the treatment of the patient is not based on this therapeutic association or any contract recognized by the HCP and the patient (Nieuwlaat et al., 2014). Both terms play a vague and deficient role in patient medication-taking behaviors. Patients' usage of these terms could cause the branding of those patients who do not consume every medicine at the prescribed time, which may weaken their relationship with their HCP, resulting in stereotyping and a negative relationship (Nieuwlaat et al., 2014).

If patients follow their prescriptions routines in a normal manner, they could obtain effective results through their medication (Burnett-Zeigler et al., 2014). In contrast, nonadherence could be described as intentional or unintentional behavior. If the patient does not take medicine due to amnesia or dexterity, this type of nonadherence is unintentional. Nonadherence could be intentional when a patient decides to take medication based on presumed results rather by taking it on time as prescribed by the

HCP. Intentional adherence also depends on past results, motivation, and appraisals of the relevant medicine.

In a 2014 study, researchers studied patients' beliefs, using the necessity-concerns framework to operationalize important views that affect the adherence of patients (E. M. Williams et al., 2014). These beliefs clearly explain adherence, based on necessities evaluated based on their diseases (E. M. Williams et al., 2014). Evidence from this study showed that many beliefs control intentional or unintentional adherence factors in patients. The occurrence of unintentional and intentional nonadherence depends on the dosage of the medicine missed at certain times and durations. For example, a patient may miss a dosage of medicine at a particular time in a day or a patient in the same pattern could miss taking medication for several days or may stop taking a medicine completely.

Patients could be nonadherent by reducing or increasing the dose of relevant medicine prescribed the HCP, rather than not taking it (Markell et al., 2014). Thus, patients show intentional and unintentional behaviors of adherence toward prescribed medication (Markell et al., 2014). Medication possession rates were defined 20 years ago to show the degree of patients' behaviors toward medication. The number derives by dividing the total number of days the patient has access to medication by the total number of prescribed days (Rosen et al., 2016).

Health professionals have a marked need to change traditional mindsets and respect the autonomy, mentality, and privacy of patients (Stempleman et al., 2014). HCPs must work to understand the importance of patients' priorities over prescription instructions. Strong arguments favor the active participation of patients in medical

processes and decisions about their treatment; these arguments have led to progressive concepts and ideologies such as shared decision-making and patient-centeredness, wherein HCPs encourage patient participation in the entire treatment process (Stepleman et al., 2014).

These arguments also laid the foundation for the developmental process to involve the patient in their health care, leading to various terminologies and definitions about the involvement of the patient (Hattingh et al., 2016). Some terms include patient involvement, patient participation, concordance, informed decision-making, and evidence-based patient choice. Charles et al. (as cited in Hattingh et al., 2016) presented one of the most authentic and widely accepted descriptions of shared decision making (SDM). Charles et al. (as cited in Hattingh et al., 2016) presented the idea of SDM as a model in which consultations involved two-way communication and the physician and patients collaborate to make decisions. A similar scenario is required for the concordance to take place: a need exists for two-way, collaborative communication between the patient and the physician, exchanging personal beliefs, views, and priorities about medications.

Another important aspect of concordance is that it does not refer to the measure of compliance (Conn et al., 2014). Compliance is the measure of a patient's behavior as it aligns with the instructions of the physician. Concordance, however, is a variable measuring a two-way process of mutual consultation; that is, SDM: a partnership approach with the physician respecting a patient's beliefs (Conn et al., 2014). Hence, in SDM, all involved HCPs regard the patient as a partner in making deliberate or

collaborative decisions about treatment and medications. SDM encourages patients to be more motivated to follow the doctor's instructions and prescriptions (Conn et al., 2014). Without such collaboration, patients may continue to refuse to engage in any treatment (Bray, Thompson, Wynn, Cummings, & Whetstone, 2005).

A close and significant association exists between a patient's participation in medical treatment, improvement in adherence to medication regimens, and diminished depressive mental state (Brody et al., as cited in Bray et al., 2005). Negotiations with patients on medications result in better adherence to medication regimens and results (Sandra et al., 2002, as cited in Bray et al., 2005). Other positive influences of bipolar interventions are the increased satisfaction level of the patient and an enhanced level of self-esteem (Burnier, Wuerzner, Struijker-Boudier, & Urquhart, 2013). A similar type of positive influence was reported as a result of patient-centered care (Burnier et al., 2013) and secondary decision aids such as websites, pamphlets, and videos, to make deliberate decisions with the involvement of the patient (Bray et al., 2005). The ratio of patients who inclined toward discontinuing medications diminished as they chose and prioritized treatment (Bray et al., 2005).

Amid this progressive research, a gap needs to be bridged. Regardless of the identification of the various factors that reduce nonadherence to medications for those in depressive states, little research sought to overcome these factors and involve patients in treatment. Though studies regarding SDM are in the developmental stages, they have provided encouraging information on its effectiveness in addressing mental health. For example, Stovell, Morrison, Panayiotou, and Hutton (2016) conducted a brief study on



SDM and reported a higher level of satisfaction and effective outcomes from the experimental group, compared to the controlled group, over 2 years. Croft et al. (2015) conducted an experiment of a similar nature, producing agreement with outcomes in a period of 3–12 months. Légaré et al. (2014) analyzed the SDM model and reported that the most dominator factor of the model is the dyad between the physician and patient, neglecting all the other possible involvements of healthcare professionals. Thus, researchers presented a need to build a more innovative model to guide healthcare professionals.

### **Measuring Adherence and Healthcare Providers' Perspectives**

The target population for this study was health caregivers to African American men living with psychiatric disorders in a Chicago-area hospital network. I sourced the sample population from caregivers in facilities nurturing people who met the inclusion criteria in a Chicago-area hospital network. The perspectives or viewpoints of HCPs affect collaboration with patients and how they provide treatment regimens; hence HCPs' perspectives are very important in understanding the complexity of human behavior.

When people behave based on their viewpoints, their actions can be predicted and based on their perceptions of what reality is, not on reality itself (Hansen et al., 2009). Viewpoints or perspectives lead people to how they act in the environment; thus, HCPs must have accurate perceptions of patients to promote evidence-based treatment that eliminates medication nonadherence in this population.

Perspectives help individuals understand and internalize their experiences, making it important for HCPs to avoid common problems and processes for measuring medication nonadherence that may not be founded in fact or reality. When making decisions on medication nonadherence toward African American male psychiatric patients, individual patient plans must be designed through the lens of each patient's unique resources and needs rather than the ambiguity of HCP perspectives.

Perspectives are how individuals personally receive, organize, and interpret impressions to form an opinion and give meaning to their environment (Ginter, Duncan, & Swayne, 2018). Perspectives of HCPs to medication nonadherence involve the abilities of HCPs to identify, communicate, and counsel patients to improve adherence to medications. The ability to achieve better outcomes is a key health care indicator.

Nonadherence to medication can result in worse clinical outcomes that may be followed by increased health care expenditures (Hansen et al., 2009). Clinical pathways must be embraced that evaluate the perspectives and viewpoints of HCPs to support the fundamental purpose of improving the quality of care. Perspectives help HCPs define their character and attitude on how to tend to patients, ultimately inducing successful interventions aimed at improving medication compliance for African American male psychiatric patients.

### **Consequences of Nonadherence**

Medical involvement in a patient's therapy is the prescribing of relevant medicine, which accounts for 15% of the total expenses of the therapy. According to

research, the National Health Service spent £8 billion on medicines in England in 2005 (Cooper et al., 2016). The usage of medicines is increasing markedly, according to a survey. In England, 13.1% of prescriptions were found for every person in 2003, showing an increase of 40% compared to the previous decade record (Cooper et al., 2016). Researchers found a variation in medication regimens ranging from 17% to 80%, due to the variety of illness, routine factors, the methodology applied, and even the methods of testing and measuring adherence (Stepleman et al., 2014).

Similarly, nonadherence can lead to severe illness and death and could increase healthcare costs (Stepleman et al., 2014). According to a sample, nonadherence could result in patients' relapse to schizophrenia and a marked decrease in left ventricle pumping in those suffering from heart diseases (Stepleman et al., 2014). Patients who do not care to comply with their medication routine while suffering from heart failure have a mortality rate 1.95 times higher than those who are adherent. Similarly, those who stop taking  $\beta$ -blockers have an initial rise in risk for coronary heart disease that is 4.5 times greater than that of patients who continue with therapy (Interian, Lewis-Fernández, & Dixon, 2013). Nonadherent patients are hospitalized 2.5% more than patients adherent to their medication regimen (Interian et al., 2013).

One factor that increased admission numbers in U.S. hospitals was poor adherence, leading to expenditures of \$100 billion annually (Interian et al., 2013). Nonadherence is charged with approximately 125,000 deaths annually, along with 11% of hospital admissions. Of recruited nursing staff, 40% lack knowledge of the importance of adherence to medical therapy (Shim et al., 2017). Medical problems surveyed in the

United States due to this factor cost the government about \$177 billion per year, directly and indirectly, increasing expenditures to pharmaceutical firms. Every year, 140 million prescriptions costing \$2.8 billion are wasted and left unfilled. Thus, 30 to 50% of prescriptions cannot achieve their medical goals, reducing the benefits of treatment (Shim et al., 2017).

According to a recent survey across U.S. and Saudi patients, children adhered to medical regimens at 61.8 and 64.9%, respectively (Conn et al., 2014). At Taif Chest hospital in Saudi Arabia, 43.8% of tuberculosis patients were found to comply, but 75% did not attend initial clinical checkups. In Tabuk, Saudi Arabia, 53% of hypersensitive patients were found to comply with their regimens, mainly men, but older people did not comply, rendering their blood pressure uncontrollable (Conn et al., 2014).

### **Medication Nonadherence in African American Psychiatric Patients**

Of the five dimensions of adherence, the most relevant and effective is the socioeconomic dimension. Patients' socioeconomic status not only affects their self-esteem and self-recognition but also profiles or stereotypes them into a specific category (Bean, Stone, Badger, Focella, & Moskowitz, 2013). For instance, a poor African American single man is less likely to adhere to medicine because of his lower self-esteem and lack of financial support. Similarly, physicians or the healthcare staff stereotype patients based on their ethnicity, race, and socioeconomic status (Bean et al., 2013). Under such circumstances, socioeconomic status impacts other dimensions of adherence as well.

A need exists to improve methods for tending to treatment adherence among hypertensive African Americans patients in Western nations. Agyemang et al. (2005) recommended that interventions to bolster ideal adherence to endorsed medications is more fruitful in this populace if health-minded experts discuss patients' worries about medications and establish trust in the capacity to take medication (self-efficacy). Khatib et al. (2014) recommended that this instructive approach prompts superior comprehension of hypertension, and mollifies worries about the related dangers of hypertension, along with mindfulness that hypertension can be controlled but not cured. Instruction ought to focus on the understanding that hypertension is not an ailment in itself, but rather that treatment is important to avert later illness that can be avoided.

Patients often stop taking medication or stop actualizing lifestyle changes when they believe their hypertension is cured. These misguided judgments about the nature and course of hypertension can negatively influence treatment adherence (Khatib et al., 2014). Shared medical appointments may mitigate these misguided judgments and appear to have a positive effect. As worries about medication and its side-effects prompt poor adherence and patients often do not discuss their dread of side-effects, specialists ought to examine side-effects regularly (Bray et al., 2005).

An examination of the profile of medically nonadherent African American patients with hypertension proposed that youthful age, smoking, and female sex related to nonadherence; in contrast, conjugal status, education level, physician advisement, and family components aligned with compliance. Social and noteworthy elements may add to nonadherence. For instance, physicians are often from social or ethnic groups that differ

from their ethnic-minority patients, potentially prompting communication issues and ensuing nonadherence. Corbie-Smith (1999) and Freedman (1998) also proposed African American patients do not trust medical personnel due to the Tuskegee syphilis probe of African American men, causing African Americans to eschew participation in research.

Meichenbaum and Turk (1987) proposed five areas of a hindrance to adherence. First, patients may have negative states of mind toward treatment, including when they have serious ailments, depression, lack of trust in healing facilities or physicians, poor memory, poor perusing capacity, and the use of optional methodologies, such as religious interventions. Second, physicians may have an uncollaborative style. Third, malady and side effects obstruct adherence. Inert or moderately asymptomatic infections and having numerous sicknesses can confuse treatment. Fourth, treatment characteristics include poor treatment efficacy and unfriendly side effects. Finally, sociological hindrances constrain accessibility to care, including high costs, expecting to require senior care, being segregated, and having low social support. Medical nonadherence is most likely affected by various of these five constraints.

Few studies have contrasted African American and Caucasian patients and systemic lupus erythematosus on rates of nonadherence. In the literature search, no other studies were discovered that considered how essential it is to know how ethnic groups contrast on obstructions to adherence. It is essential not to assume all ethnic groups obstruct adherence for the same reasons. Patients, physicians, illnesses, treatments, or natural boundaries may influence adherence diversely. Thus, ethnic-group members may

require different motivations to gain adherence, requiring ethnic-specific, as well as person-specific interventions to change those boundaries and enhance adherence.

Lifestyle changes, including evading the sun, maintaining a strategic distance from pregnancy, and making and keeping medical referrals, differ markedly among patients and conceivably cross-ethnic groupings. For instance, Caucasian patients with lupus are more often photosensitive than are African Americans; in this manner, ethnic groupings require distinctive guidance to maintain a strategic distance from the sun. Significantly, researchers may evaluate these nonadherence areas independently, as they often relate only minimally.

### **Conceptual Framework**

I used outcome expectations and self-efficacy empirical models based on social-cognitive theory as the framework for conducting the present study. Of the several outcome expectations and self-efficacy empirical models, I used the theory of reasoned action and theory of planned behavior to systematically examine the various determinants of medication nonadherence in African American male psychiatric patients. The patients' perspectives or viewpoints that adherence is effective establishes the intention to adhere to medication. Moreover, the support needed to adhere to prescribed medication strengthens the patient's intention and ultimately the patient's actions to adhere to the prescribed therapy.

Aligned with observations from two observational and one randomized study, a positive association emerged between personal beliefs and the possibility of adherence to

antidepressant medications (Horne et al., 2013). These theories concern an HCP's personal beliefs about the usage of medications and effects to influence the viewpoint of the patient.

### **Health Communication Model (HCM)**

The HCM explains adherence as the complicated combination of personal traits and behaviors that highly depend on the patient's knowledge of the entire process of treatment, satisfaction level with the chosen treatment, and the established relationship between the patient and the practitioner (Conn et al., 2014). Precisely put, the appropriate and competent skills of the practitioner can motivate the patient to change his negative behavior and push him to actively participate to build an effective relationship with the practitioner (Conn et al., 2014).

The term adherence can be attributed to the dynamic set of behaviors and a continuous process of treatment. As described earlier, adverse perspectives or beliefs can change with the proper intervention, support, and most importantly, the patient's experience throughout the treatment processes. Hence, it is extremely important to understand that the initial image, impression, and contact with the practitioner will determine further contact with the patient (Conn et al., 2014).

### **The Theory of Planned Behavior**

The theory of planned behavior is an extension of the theory of reasoned action, initially proposed by Ajzen (1985). I applied this theory to observe and analyze the association and relation between and among patients' beliefs, intentions, and behaviors.



This theory suggests that three distinct beliefs define human behavior: behavioral beliefs about the possible consequences of behavior; normative beliefs related to expectations from other humans, and control beliefs. These three basic beliefs are determinants of the general behavior of the patient (Zemore & Ajzen, 2014).

### **Horne's Theoretical Model**

This model suggests and reports a firm relationship between a patient's personal beliefs and their adherence to medications (Horne et al., 2013). Thus, the patient's beliefs must be considered before managing compliance issues. The objective of antidepressants as necessity-minus-concerns associates the level of nonadherence and outcomes. The adherence level is at its peak when concerns are greater than necessities, but at the lowest when concerns exceed necessity (Horne et al., 2013).

Lower levels of adherence also align with high scores on the specified Concern scale of the Medicines Questionnaire (Horne et al., 2013). Researchers observed that the better and efficient involvement of the patient in the decision-making processes of the treatment results in a better level of adherence, increased satisfaction, and better results from the medications (Le et al., 2016). Similar results accrue from the proper intervention of practitioners (Le et al., 2016).

The HCM helps in understanding the factors and dimensions that affect communication between HCPs and patients to determine the level of medication nonadherence. Similarly, the theory of planned behavior helps in understanding instances and factors affecting the lack of medication adherence in patients and how HCPs can help

patients improve their medication adherence. The literature review conducted demonstrated the need to investigate the determinants of medication nonadherence in general and in minority populations such as African American psychiatric patient populations in particular.

### **Implications of Social Change on Medication Nonadherence**

Social change broadly refers to alterations in the social order of a society, including social behaviors and relationships (Bosworth, 2012). Social change accrues as a result of several societal courses such as changes in the ecosystem, technological change that creates new social behavior and attitudes, and social relations. Political, ideological, or economic movements initiate social change (Bosworth, 2012). This change may come in the form of altered levels of social support or altered social behaviors.

Social support may be defined as the actuality or perspectives that one is cared for and is part of a social network that is supportive. Social changes in support may come in the form of increased or reduced social support. An increase in support helps ensure greater adherence to medications; in contrast, decreased support reduces patients' propensity to adhere to prescribed medications (Bosworth, 2012). This is because an increasingly involved multitude helps patients cope with feelings more than does lack of a sense of belonging.

Social support further encourages patients to progress through periods of medication use without thoughts of nonadherence. Social support helps remind patients of particular times to take medication and the importance of adherence (Olson, Young, &

Schultz, 2016). Technological change has made social support easier by enabling interactions between the patient and a user interface that reminds the patient of the time to take medication and further encourages adherence (N. J. Hall, Rubin, & Charnock, 2013)

Social change may also come in the form of a change in social behavior. Social behavior includes basic human behaviors ranging from physical and emotional aspects to the influence of ethics, genetics, and culture (N. J. Hall et al., 2013). Social support works positively to develop a more medication-friendly patient who understands the importance of adherence and the demerits of nonadherence (N. J. Hall et al., 2013).

Following the provision of social support, medical experts can strategize to cultivate behaviors that encourage adherence and condemn nonadherence, working to further ensure patients adhere to medication regimens (Bosworth, 2012). Social change further works toward changing attitudes of people comprising the social structure (N. J. Hall et al., 2013). Once a patient's attitudes toward their medications and illness change, their frequency and pattern of use of medication changes (Daley & Salloum, 2001). Once a patient develops a positive attitude toward medication and their particular ailment, they are in a better position to maintain adherence to the prescribed medication and the probability of getting well again (Daley & Salloum, 2001). Thus, social change can more positively impact psychiatric patients by influencing their attitudes, behaviors, and viewpoints on matters regarding social support (Daley & Salloum, 2001). In turn, social change can have an overall effect on their use of medication and, subsequently, on adherence (Bosworth, 2012).

## Summary

In Chapter 2, the review of literature related studies on medication nonadherence in the general population and African American psychiatric male patients in particular. In this chapter, I evaluated the correlation with perspectives or viewpoints of HCPs to African American male psychiatric patients. The review of literature established that the problem of medication nonadherence is widespread and studied extensively, whereas very few studies addressed issues of medication nonadherence in African American men who are psychiatric patients. This lack is irrespective of the fact that the issue of nonadherence is more prevalent in African American male psychiatric patients.

In critically reviewing the literature on sociocultural and personal factors that affect medication nonadherence, I considered the five dimensions of nonadherence. Based on the literature review conducted, very few studies examined the determinants of medication nonadherence among African American male psychiatric patients. In Chapter 3, I describe the research methodology used to conduct this study and the data-analysis approach used.

### Chapter 3: Research Method

As discussed in Chapters 1 and 2, how HCPs perceive African American male psychiatric patients can affect medication nonadherence and the type of overall care being provided to this population. Hence, it is important to align and correlate the perspectives or viewpoints of these HCPs with patient social and demographic factors that might conflict with medication adherence. The lack of previous in-depth research that evaluated African American male patients suggested this topic is a viable subject to review and worthy of a doctoral study. Because medication nonadherence presents a strong problem in maintaining optimal health outcomes, if HCPs' viewpoints are better understood, the provider-to-patient relationship could improve medication compliance and initiate better health outcomes.

#### **Purpose**

The purpose of this qualitative case study research was to explore the viewpoints of HCPs toward medication nonadherence among African American male psychiatric patients using gross family income, marital status, and age as sociodemographic factors in a Chicago-area hospital network. In this chapter, I describe the study design, sampling approach, study rationale, instrumentation and study tools, data analysis, and ethical considerations. I include the rationale regarding why the selected study design was appropriate. I restate the research questions and provide a detailed description of data analysis methods used to answer the research questions. I also discuss sample-size estimations for determining saturation and any potential limitations related to the study design and data sources.

## **Research Design and Rationale**

This qualitative case study research involved exploring HCPs to understand their underlying perspectives and viewpoints regarding African American male psychiatric patients. Because this study aimed to gain deeper knowledge, in-depth understandings, thoughts, and viewpoints, a qualitative study design was more appropriate than a quantitative study design. The qualitative design is more applicable when there is a need for explanation and to establish relationships among existing variables or factors. Because this was nonexperimental case-study research, the qualitative study design was applicable and selected as appropriate.

## **Case Study Research**

It is essential to select a research approach that enables the appropriate data-collection process to answer the research questions in a study (Creswell, 2009). Creswell (2009) identified five types of qualitative approaches for a qualitative study: ethnography, grounded theory, narrative study, phenomenological study, and case study. Because this study evaluated African American male patients, I considered the idea of an ethnographic study. However, the ethnographic study design would be inappropriate because this study did not concern the lifestyles of African Americans in general; rather, this study aimed to examine this ethnic group regarding medication nonadherence. Therefore, ethnography was unnecessary for this study and not selected. I selected the case-study approach because it provides the opportunity to more deeply query the roots of this study on medication nonadherence and provide an insightful understanding of this concept. Also, case studies provide the ability to be exploratory.

I formulated four overarching research questions for this study to explain the perspectives of HCPs regarding medication nonadherence among African American male psychiatric patients using age, gross family income, and marital status as variables. For the data collection, I interviewed eligible HCPs who met the study inclusion criteria to answer the research questions. Interview Questions 1 through 10 helped answer RQ1, whereas Interview Questions 11 through 15 focused on RQ2, RQ3, and RQ4 (see Appendix B).

The research questions crafted to guide this study were:

*RQ1:* What are the most important determinants of medication nonadherence among African American male psychiatric patients according to HCPs in a Chicago-area hospital network?

*RQ2:* According to HCPs in a Chicago-area hospital network, how does age determine medication nonadherence among African American male psychiatric patients?

*RQ3:* According to HCPs in a Chicago-area hospital network, how does marital status determine medication nonadherence among African American male psychiatric patients?

*RQ4:* According to HCPs in a Chicago-area hospital network, how does socioeconomic status based on gross family income determine medication nonadherence among African American male psychiatric patients?

### **Role of the Researcher**

Establishing defined roles for the researcher was vital for this study. As the researcher in this study, I had the primary duty of facilitating the study under the guidance of my Walden University doctoral committee. As a doctoral student conducting this research, I had the goals of upholding honesty, sincerity, accountability, transparency, and accuracy at all levels of the study. I was the primary and sole data-collection agent, guiding ethical consideration for data collection in this study.

Although I am an HCP, I remained professionally separated from participants in this study and fully adhered to the code of conduct and policies established by the Institutional Review Board (IRB) of Walden University (see Appendix C). My goal as the researcher was to avoid bias, maintain neutrality, and provide a scientific and empirical study devoid of biased language. I maintained the credibility of this study through various steps to provide a sound and trustworthy empirical study. Also, as the researcher, I avoided personal opinions or expectations that could compromise the integrity of this study or present situations involving bias. I worked to ensure accuracy, precision, truthfulness, honesty, and the execution of scientific research.

### **Instrumentation**

The main measurement instrument in this dissertation was one-on-one semistructured interviews with HCPs who met the inclusion criteria. The interviews aimed to seek responses from HCPs and obtain their viewpoints or perspectives regarding age, marital status, and gross family income as factors that influence medication



nonadherence among African American male psychiatric patients. Patton (2002) said that interviews are useful to capture rich information and meaningful data in qualitative research. This is because the researcher obtains the opinion of the participant directly and the ability to quote verbatim what the participant is communicating. Thus, I used interviews in this study to engage in participant perspectives and viewpoints.

In contrast to using a questionnaire or survey, semistructured interviews provided the avenue to ask open-ended questions and allowed common themes to emerge in the data collection through interview discussions. Semistructured interviews allow researchers to probe deeply and conduct a flexible and free-flowing conversation discussion with the participants. I did not consider group interviews or focus-group interviews for this study. I conducted all interviews in person.

I planned an interview session for this study to last a maximum of 30 minutes. Interview sessions were digitally audio-recorded and subsequently transcribed into written documents using a voice-to-word digital application. The raw audio-to-text conversion application converted the audio files to written documents verbatim. Alongside the audio recordings, I also took copious notes of the interview discussions. I recorded important points provided by participants in my dedicated notebook. I ensured I wrote down as many important points as I could during the interviews. I ensured the notes were legible and valuable to the discussion. I later compared the handwritten notes to the transcribed notes to ensure the reliability and validity of the data.

## **Psychiatric Healthcare Providers**

Using a qualitative research methodology (semistructured interviews with HCPs), I sought to explore the perspectives or viewpoints of HCPs. An HCP is an individual who offers preventive, curative, promotional, or rehabilitative health care services (Burgess et al., 2017). Hence, the target population for his research was providers who offer services to improve the mental health of individuals or treat psychiatric illnesses. Accordingly, HCPs in this study were doctors, registered nurses, nurse practitioners, psychiatrists, clinical psychologists, clinical social workers, psychiatric mental health nurse practitioners, mental health counselors, psychiatric care managers, or clinical social workers authorized to offer psychiatric health care, as defined by law (Burgess et al., 2017). Although the scope and practices of these professionals differed, the identified HCPs in these roles all provide health care services to African American psychiatric patients.

## **Sampling Method and Participant Size**

The purposeful sampling strategy allows researchers to predetermine participant criteria and control participant selection (Creswell, 2009). Purposeful sampling enables a researcher to set characteristics for the participant population based on defined study objectives. As a nonprobability sampling method, purposeful sampling enables a researcher to select participants based on the outlined criterion. In using a criterion sampling method of purposeful sampling for this study, I used the chosen criteria to select HCPs who are experienced in providing health care services to African American male psychiatric patients. Among the inclusion criteria are stipulations that study

participants must have had at least 2 years of direct care experience with African American male psychiatric patients. Participants must have held a current license. As a whole, the inclusion criteria outlined for this study follow: nurses, doctors, psychologists, psychiatrists, counselors, or therapists; a minimum of 2 years of direct-care experience; experienced working with African American male psychiatric patients; hold a current and valid license; and employed in the Chicago-area hospital network of interest.

Potential participants excluded from this study were people who did not meet the inclusion criteria for the study outlined above. These are people who I did not interview for data-collection purposes in this study. The exclusion criteria outlined for this study follow: HCPs who did not have a minimum of 2 years of experience in the direct care of psychiatric patients, HCPs who did not agree to the informed consent, and HCPs who did not have direct work experience with African American male psychiatric patients.

### **Recruitment Strategy**

To recruit participants for this study, I sent e-mails to known HCPs who are colleagues in the healthcare field; I sent these e-mails to colleagues with whom I had previously worked. These potential participants also included people I previously met at conferences, seminars, networking sessions, professional societies, or former classmates who had shared contact information. The recruitment e-mail also asked for referrals to eligible participants interested in the study and asked e-mail recipients if they were personally willing to participate. I presented the e-mail to potential participants in a manner that allowed them enough time to consider participation with no undue pressure or coercion.

Subsequently, based on referrals, I employed the snowball approach. I asked currently recruited participants to refer me to other people in their professional network who might meet the inclusion criteria. Based on referrals, I approached those people with the recruitment letter and asked their consent to participate in the study. I was careful to prevent undue influence and coercion. I approached the referred HCPs to get their consent because individuals may have difficulty saying no to a referral from an authority figure. I provide a recruitment strategy e-mail in Appendix D.

### **Sampling Strategy and Sample Size Estimation**

Because I could not collect data from everybody or the entire given population, Morse (2000) suggested that from five to 50 participant interviews is adequate in a qualitative study. For an ethnographic study or a grounded-theory study, Morse (1994) suggested a sample size of approximately 30 to 50 participant interviews. However, Creswell (1998) suggested 20 to 30 participant interviews is sufficient to achieve saturation in similar studies. In phenomenological studies, Creswell (1998) recommended five to 25 interviews and Morse (1994) suggested at least six participant interviews. These recommendations helped me estimate how many participants I would need; however, ultimately, the required number of participants should depend on when saturation is reached.

In case studies, T. Bowen et al. (2010) identified that a minimum of 10 interviews should be sufficient to achieve saturation. Based on literature from Morse (2000), I estimated a minimum of 30 participant interviews for this study to attain saturation. However, I eventually conducted 40 participant interviews to reach saturation. Data

saturation occurs when no new or additional responses accrue in the data-collection process. Saturation also occurs or when no new themes or codes emerge from the data-collection process (Baker, Edwards, & Doidge, 2012). I pursued the 40 participant interviews to allow myself to continue the participant interview process until no new leads or no new themes emerged in the data; at this point, saturation occurred.

### **Data-Analysis Tool**

In maintaining data integrity in a qualitative study, Bringer, Johnston, and Brackenridge (2006) advised researchers to use computer-assisted qualitative data analysis. This form of assistance is useful to condense raw data from multiple sources into an applicable single-unit format. With this approach, the computer-assist extracts repeating, significant, frequent, and popular themes embedded in the raw data files, arranging the data to answer the research questions raised in the study.

NVivo 11 was suggested as an electronic qualitative data-analysis tool that is capable of organizing, exploring, and analyzing the research data easily and quickly. NVivo then summarizes and collates the extracted themes to connect the study questions and the summary of findings identified from the raw data. This application can provide an analysis of thematic and word data in contextual patterns. I used NVivo qualitative data-analysis software to perform the data analysis for this dissertation.

### **Data Analysis Plan**

Using NVivo 11, based on the data collected during participant interviews, I employed an inductive approach to analyze and identify themes about perspectives or

viewpoints of HCPs on age, marital status, and gross family income as factors affecting medication nonadherence among African American male psychiatric patients. After the audio recording of each interview session, I immediately transcribed the recordings to written documents. I reviewed each transcribed document multiple times to check for errors and accuracy. I read through the transcripts several times to assess content and quality. I compared this transcribed note to my handwritten notes to ascertain similarities, ensuring I maintained the reliability and validity of the data. In the review, the notes and the transcript provided almost an exact match in content.

Subsequently, the inductive approach for qualitative data analysis commenced. With an inductive approach in a qualitative study, researchers condense raw data into a succinct format with key themes and common responses extracted in the same pattern (Thomas, 2006). This process allowed for the opportunity to detect patterns, similarities, and regularities in the generated data. I subsequently explored and analyzed those patterns to eventually develop answers to the research questions and reach a conclusion.

From the collation of the interview transcripts, I established and identified meaning units. These are words and paragraphs that are alike and similar or dissimilar in meaning. I described the emerging themes from participants' perspectives or viewpoints, verified by the handwritten notes to ensure I represented the overall impression of participants in the final data. This was the *a priori* codebook for the analysis containing broad codes and labels assigned to anticipated interview responses, based on the content of the interview guide.

These *a priori* codes formed the parent codes derived from the broad themes of the generated data. The *a priori* codebook contained parent codes derived from the broad themes of the interview guide and sub codes related to the parent codes. The underlying meanings that were considered formed the latent content of the categories that were then formulated into themes. The meaning units were then abstracted and labeled with codes that provided a better interpretation of a huge chunk of information into small units.

Patterns and connections among the themes to support or inform the research questions were established. Furthermore, I arranged the emerging themes aligned with participants' viewpoints, verified by the handwritten notes to ensure I represented the overall impression of participants in the final data accurately. I completed this grouping of the raw data based on similarities, synonyms, and differences, to form emerging concepts. I employed heading-style coding such that I gathered responses for each question into one place for easier analysis. In this process, I separated the themes that eventually answered the overarching research questions. This process allowed me to group responses to each question into a separate heading. The next step was to organize the emerging themes.

Last, I performed open coding. I uploaded the organized data into NVivo 11 and assigned labels from the codebook to portions of the text. I continuously revised and updated the codebook with new ideas that were not captured in the initial *a priori* codebook. In certain instances, I assigned more than one label to text segments to appropriately capture the ideas expressed by participants. Thereafter, I deduced the major emerging themes demonstrated by the essential findings from the research. I described

the emerging themes aligned with participants' perspectives or viewpoints, verified by the handwritten notes to ensure I represented the overall impression of participants in the final data.

### **Ethical Considerations and Issues of Trustworthiness**

In a study setting, researchers typically face ethical and moral challenges from concept to designing and reporting that can call the reliability of the study into question. Schreier (2012) said that issues regarding, confidentiality, anonymity, informed consent, loyalty and allegiance, honesty, and truthfulness, can arise that may compromise the quality of a research study. These incidents may bring into question the credibility of such studies and comprise the outcome of the study. However, certain key concepts that conformed to the system of ethical considerations and trustworthiness in modern research principles should be used to gain the trust and credibility of readers. Often, mistakes arise from mishaps experienced with studies. Voluntary participation and informed consent are the hallmarks of ethical research considerations. These ethical principles require participants to be fully informed of why they are involved in the research and the possible outcome that can emanate from the results.

Also, honesty in collecting data, data management, data analysis, and reporting study outcomes are crucial for consideration. This qualitative case-study research depended markedly on seeking perspectives and viewpoints of respondents; hence, honesty and accuracy of participants' responses and researcher neutrality were crucial to maintaining credibility, reliability, and validity of this study. Ensuring that the data



collection, data analysis, and study outcomes were conducted without error was quite important to assure trustworthiness and reliability.

### **Summary**

In Chapter 3, I discussed the research methodology used to execute the present research study. Specifically, I presented the study design used and the rationale for choosing the indicated study design. The chapter included the research questions that needed to be answered by research participants and detailed the related hypotheses. I described the data-collection method, the indicated participant-recruitment strategy, and the statistical tests used to answer the research questions, and discussed the recruitment method and the interview approach for data collection. In Chapters 4 and 5, I provide the findings and interpretation of the results.

## **Chapter 4: Results**

I present the results of the data analysis in this chapter. This qualitative case-study research was characterized by the exploration of deep meanings and in-depth perspectives and viewpoints of HCPs to understand their underlying knowledge regarding African American male psychiatric patients in medication nonadherence. This study aimed to identify reasons for medication nonadherence using socioeconomic factors based on provider viewpoints. The purpose of this study was to explore the perspectives or viewpoints of HCPs toward medication nonadherence among African American male psychiatric patients using gross family income, marital status, and age as sociodemographic factors in a Chicago-area hospital network.

### **Research Setting**

The Walden University IRB approved the commencement this study on August 2, 2019. Recruitment for potential participants started on August 9, 2019, with the distribution of recruitment letters through e-mails soliciting prospective participants (see Appendix D). I conducted 40 structured interviews with study participants. I used a sample structured interview guide during each interview session (see Appendix B). The 15 interview questions focused on how HCPs perceive medication nonadherence among African American male psychiatric patients in a Chicago-area hospital network to help answer the four crafted research questions. Interview Questions 1 through 10 helped answer RQ1, whereas Interview Questions 11 through 15 focused on RQ2, RQ3, and RQ4.

*RQ1:* What are the most important determinants of medication nonadherence among African American male psychiatric patients according to HCPs in a Chicago-area hospital network?

*RQ2:* According to HCPs in a Chicago-area hospital network, how does age determine medication nonadherence among African American male psychiatric patients?

*RQ3:* According to HCPs in a Chicago-area hospital network, how does marital status determine medication nonadherence among African American male psychiatric patients?

*RQ4:* According to HCPs in a Chicago-area hospital network, how does socioeconomic status based on gross family income determine medication nonadherence among African American male psychiatric patients?

This study had a response rate of 30.5% from solicited participants. Of participants, 19 responded through initial contacts and 21 responded through the snowball approach. I conducted the interviews in locations selected by and conducive to participants. The interview sessions took place in private environments to ensure confidentiality and anonymity of participant responses. I offered no inducement or coercion to prospective participants to influence participation in the study. All participants had work experience of at least 2 years with African American male psychiatric patients. I excluded eight interested HCPs from participating in the interviews because they did not meet the inclusion criteria.

### Participant Demographics

I conducted 40 participant interview sessions for this study before achieving saturation. Of the participants, 60% were women. The participant pool was diverse in experience and of the participants, 75% were highly confident when answering interview questions. Study participants included four distinct provider groups: registered nurses, nurse practitioners, therapists/counselors, and physicians (see Table 1).

Table 1

#### *Profile of Participants*

	<i>n</i>	%
Gender		
Male	16	40
Females	24	60
Years of experience as a health care provider		
< 5 years	6	15
5–10 years	6	15
11–20 years	18	45
> 20 years	10	25
Years working with African American male psychiatric patients		
< 5 years	4	10
5–10 years	12	30
11–20 years	16	40
> 20 years	8	20
Health care professional category		
Registered nurses	20	50
Nurse practitioners	4	10
Therapist/Counselors	6	15
Physicians	10	25
Confidence to answer questions about African American male psychiatric patients		
Highly confident	30	75
Confident	8	20
Somewhat confident	2	5

*Note.* *N* = 40

### **Data Collection**

I sent e-mails to prospective participants using the recruitment letter (see Appendix D), seeking their consent to participate in interviews. The recruitment e-mail requested volunteers willing to participate in study interview sessions or refer other people who might meet the inclusion criteria, using the snowball approach. Interested participants responded either by phone or to the e-mail listed in the recruitment letter, indicating their willingness to participate in the study. I communicated to all prospective participants that the interview would last about 30 minutes. After prospective participants agreed to participate, time and venue for interviews were jointly agreed upon. I also provided the 15-interview-question document to participants ahead of time to elicit their interest and generate thoughts in advance to save time.

Each interview session started with an overall explanation of the study, as well as the background and purpose of the research. I sent informed-consent forms and discussed Walden University IRB approval with each participant to establish the credibility and scope of the study. After participants provided verbal consent, the actual interviews started. I audio recorded all interview sessions and took copious notes. After each session, I listened to the recorded voice notes with each respondent to establish the accuracy of recordings. I also shared my handwritten notes to ensure accuracy.

### **Data Analysis**

Subsequently, I transcribed audio recordings of each interview session to Microsoft Word documents. Transcription software converted audio files to Word

documents verbatim. I read the transcribed notes several times to ensure no errors existed or were incorrectly translated. Subsequently, I saved the transcribed documents on a password-protected thumb drive and printed them for review and manual coding. When not in use, I made sure all materials were secured under lock. Furthermore, I carried out the data-analysis phase in a manner that allowed for reproducibility so subsequent studies can apply the same methodology. This was done to confirm the dependability and confirmability of the study.

With the inductive approach for qualitative data analysis, I extracted the essential themes and vital information from the raw data to answer the research questions. From the collation of interview transcripts, I established and identified meaning units. These are words and paragraphs that are alike and similar in meaning. I described emerging themes aligned with participants' perspectives or viewpoints, verified by handwritten notes to ensure I represented participants accurately in the final data. These descriptions formed the *a priori* codebook for the analysis, containing broad codes and labels assigned to anticipated interview responses based on the content of the interview guide.

These *a priori* codes formed the parent codes derived from the broad themes of the generated data. The *a priori* codebook contained parent codes derived from the broad themes of the interview guide and subcodes related to the parent codes. The underlying meanings formed the latent content of the categories, then formulated into themes. The meaning units were then abstracted and labeled with codes that provided a better interpretation of a huge chunk of information into small units.

### **Ethical Concerns and Issues of Trustworthiness**

With informed consent obtained from all participants, I made sure to carry out the interviews professionally, respectfully, and with no undue influence. I maintained that all participants met the inclusion criteria for this study. I excluded prospective participants who did not meet the inclusion criteria from participating. All respondents had the opportunity to hear and review the interview recordings to ensure I captured their responses verbatim and accurately. I also shared my handwritten notes with all participants to validate their responses and provide follow-up responses, where needed.

I ensured consistency and followed the same process for all interview sessions. I ensured I asked the same questions in the open-ended format and probed further when required. Researchers are to abide by ethical practices and be thorough in their research work to gain validity and reliability for their study (Merriam, 1998). I ensured I followed proper interviewing skills, did not preempt respondents, and avoided bias to gain truthful responses from participants. This research subject is quite sensitive and could be volatile if not properly handled; hence, I ensured I presented the questions to respondents in a clear, concise, and respectful manner.

As an HCP myself, I made sure I avoided conflicts of interest as an ethical concern. I was very careful not to interject or exhibit body language contrary to respondents' beliefs during the interviews, especially to participants that provided vague or outlying opinions. I ensured I communicated with each participant to provide responses based on individual experience working with the population of interest. I also ensured that I communicated to participants that their responses should be based on the

experiences they have had working with the identified group in the Chicago-area hospital network.

### Results Presentation

The conceptual framework used in this study is based on social-cognitive theory. The framework examines racial factors relating to medication nonadherence using sociodemographic variables. In the analyzed data, I used responses generated from the raw data to answer RQ1 (see Table 2). This question targeted understanding the perceptions of HCPs regarding the most important determinants of medication nonadherence among African American male psychiatric patients according to HCPs in the Chicago-area hospital network.

Table 2

*Frequency Table of Top 10 Keywords/Terms for Research Question 1*

	Word	Count
1	Knowledge/Understanding/Education	119
2	Side effects	101
3	Stigma	90
4	Trust/Fear	81
5	Quantity/Amount	72
6	Cost	70
7	Support system	66
8	Poison/Chemical	55
9	Diagnosis	44
10	Emotions	31



The vast majority of participants agreed that a greater disparity exists for medication nonadherence among African American male psychiatric patients than members of other racial groups. A consistent response was that provider communication and educational level of patients are contributing factors to medication nonadherence in this population. The vast majority of respondents noted that the level of education of the patient and how the provider communicates the medication regimen to patients usually play a part in determining if patients will comply with the medication protocol.

For example, Participant 12 said, “Inadequate health care provider communication and education with patients can cause medication nonadherence,” whereas Participant 21 stated, “Patients lack understanding on why they are taking the medications. This happens when the purpose and functions of the medications are not properly explained to patients.” Participant 4 offered this view: “Providers need to do a better job to explain the side effects of medicines, the effectiveness of the medication, and safety of the medication to patients in order to establish medication compliance.”

Additional ideas for HCPs included comments by Participant 32—“Medication information materials are written in way to high literacy level for psychiatric patients and this fails to educate the patients leading to medication non adherence.” and Participant 1: “Sometimes psychiatric patients engage in medication non adherence because the prescribed medication might interfere with lifestyle or requires significant behavioral changes that the patients is not willing to embrace.”

Another reason elucidated about medication nonadherence of African American male psychiatric patients was the complexity of the medication and the associated stigma.

In that regard, Participant 8 said, “Patients that requires high drug regimen are usually more prone to non-adherence and not able to take their medication as prescribed e.g. number of pills or doses per day.” Participant 22 suggested “Stigma associated with taking psychiatric medicines for an extended period over time induces medication non adherence.” Finally, Participant 9 averred, “Intentional medication non adherence is high among African American patients because of lack of information resources as well as limited health literacy.”

Another consistent response from participants was that patients sometimes exhibit fear, which prevents them from being compliant with their medication, and this factor also aligns with lack of education and information on the patient treatment plan. The fear of medication compliance or an extended period of time of taking medications occurs when patients do not agree with the diagnosis or when the patient’s mental status impacts how they view the medication. Participant 10 said, “Some African American male patients believe that some medication such as Psychiatric medication causes impotence and such medications are harmful.” Participant 22 suggested, “The fear of being labeled as a psychiatric patient increases medication non adherence within African American psychiatric male patients.” In agreement, Participant 30 opined, “The fear of huge medication cost is a reason why African American psychiatric male patients do not use their medication.” Finally, Participant 1 also addressed fear: “Patients fear the absence of confidentiality or privacy and that is why they don’t use their medication.”

Participant 10 raised specific points on cultural and social factors relating to African American male psychiatric patients. This participant noted that the social and cultural background of patients in this population induces medication nonadherence:

A typical African American Psychiatric male patients believes they will automatically be mistreated by the health care system so they are prone to medication nonadherence. ... The suspicion and bias of the health care system towards African American patients causes them to go through medication non adherence. (Participant 10)

RQ2 sought to investigate how HCPs in the Chicago-area hospital network view and understand age to determine medication nonadherence among African American male psychiatric patients. In evaluating this question, HCPs perceived that age did not individually play a part in determining medication nonadherence in patients as a determinant factor. Rather, difficulty with medication adherence is common to all age groups. However, older adults may have more difficulty adhering to their prescription plan (Black, Rabins, German, McGuire, & Roca, 1997). A larger portion of study participants determined that younger patients are more likely to comply with their medication plan than older patients in this population. Of participants, 55% mentioned that younger African American male psychiatric patients are more adherent, whereas 45% agreed that older African American male psychiatric patients are more adherent. Study participants noted that older African American male psychiatric patients have increased levels of experience in managing their medication regimen and are less likely

to be nonadherent. Study findings noted that older African American male psychiatric patients are more medication adherent.

Study results also showed that older patients are more likely not to consume their prescribed medication compared to younger patients, based on provider recommendations. Rather than forgetting to take medications, study results also showed that when older patients do not comply with their prescribed medication plan, providers attribute that lack of compliance with an inability to renew their prescriptions with good timing and in some cases procrastinating to refill prescription. HCPs perceived that older patients living in a home setting have more support, encouraging them to be more adherent compared to younger patients residing alone. This may explain why older patients may be less likely to be nonadherent compared to younger patients (see Table 3).

Table 3

*Age as a Determinant of Medication Nonadherence*

	<i>n</i>	%
Younger African American male psych patients are more non adherent	18	45
Older African American male psych patients are less non adherent	22	55

*Note.* *N* = 40

Participant 22 indicated, “Younger ages are more medication adherent compared to older ages because of ignorance and lack of information.” Participant 30 expressed, “Based on my experience the older patients are usually the ones that exhibit medication nonadherence, they have strong potential risk factors for medication nonadherence.” Participant 40 expressed the same notion, “Older Patients over 60 years of age typically are less non adherent and younger patients are the more nonadherent.” Finally,

Participant 18 said, “Typically, older patients consume several medication types because of multiple diseases and health conditions, so they are sometimes known to be less non adherent because they need all the medication for their continued living.”

RQ3 sought to investigate how HCPs in a Chicago-area hospital network understand how marital status determines medication nonadherence among African American male psychiatric patients. In answering RQ3, the majority of respondents agreed that marital status significantly and independently aligned with medication nonadherence in African American male psychiatric patients in that the level of medication nonadherence is lower in married patients. Analysis of respondent feedback on this research question showed that lower nonadherence is common among patients who are married or cohabitated with a significant partner and lived together in a home setting. Of participants, 80% mentioned that the presence of a significant partner serving as a support system induces married patients to be more medication adherent. Study results indicated a high level of medication adherence among patients who are married, as the relationship support system acts as positive reinforcement and emotional encouragement, thereby reducing medication nonadherence. Married patients enjoy support, attention, and care from their partners, which helps reduce the level of medications nonadherence.

HCPs reported that encouraged health care use commonly leads to less nonadherence by patients who are emotionally engaged. Several participants repeatedly mentioned that married patients are more likely to follow their medication regimen. Of study respondents, 20% reported that a higher prevalence of medication nonadherence

occurred with patients who lacked emotional support compared to patients who are married or have other forms of emotional support. Several reasons evolved from the study analysis. In sum, participants noted that home-domiciled patients, particularly married patients, showed higher levels of medication adherence (see Table 4).

Table 4

*Marital Status as a Determinant of Medication Nonadherence*

	<i>n</i>	%
Married African American male psych patients are less non adherent	32	80
Unmarried African American male psych patients are more non adherent	8	20

*Note.* *N* = 40

Married patients are more likely to follow their medication regimen. (Participants 4, 21, 18, 23, and 36). For example, Participant 2 said, “Significant others or partners influence medication compliance.” Specially, Participant 33 indicated, “Married patients enjoy the support, attention, and care from their lovers which helps to reduce the level of medications nonadherence. ... The level of medication nonadherence is lower in married patients and have lesser health risk.” Participant 14 also thought “Married patients will have someone to remind them to take their prescription medication compared to unmarried patients.”

However, three participants provided contrary perspectives on this topic, asserting that marital status might not influence medication adherence. Participants 2, 4, and 30 noted that marital status might not directly influence medication nonadherence in this group of patients. These participants mentioned that marriage in its entirety cannot be the sole independent parameter to determine medication adherence. For instance, Participant

2 said, “Some psych meds cause sexual nonperformance, so certain patients hide their prescribed medication from their partners.” In line with that notion, Participant 4 indicated, “Marital status do not really play any role in medication non adherence in African American patient because some are not even married and liv alone.” Participant 30 emphasized, “Marital status play little to no role in determining direct correlation with medication non adherence.”

It was evident that medication nonadherence is a complex behavioral issue with several health consequences. Therefore RQ4 sought to understand how HCPs in a Chicago-area hospital network understand socioeconomic status, based on gross family income, to determine medication nonadherence among African American male psychiatric patients. Patients’ knowledge and beliefs about their health conditions has been identified as either a motivation or barrier to medication adherence (WHO, 2003). Responses to this question were widely divided among participants (see Table 5).

Table 5

*Family Income as a Determinant of Medication Nonadherence*

	<i>n</i>	%
Younger African American male psych patients are more non adherent	16	40
Older African American male psych patients are less non adherent	16	40
No opinion on how family income affects medication non adherence	8	20

*Note.* *N* = 40.

HCPs identified several variables and factors to determine medication nonadherence among African American male psychiatric patients. HCPs identified no single factor that independently causes this behavioral issue. Amid the array of responses

received for this question, a common line for many respondents was that a patient's cognitive ability to self-manage their prescription-medication protocol is vital and important to reducing medication nonadherence. Therefore, the level of health literacy of the patient is a key indicator of medication adherence. Low health literacy and limited education proficiency were identified as factors that influence medication nonadherence. In addition, limited access to health care facilities and the availability of the prescription medication were also identified as determinant factors. Characterized by a patient's inability to access a pharmacy, high medication costs, the lack of or inadequate insurance, or variations in the severity of symptoms arose across patient profiles.

In the course of this study, factors that create medication nonadherence can change from time to time among patients and a combination of variables with multiple risk factors can cause nonadherence. Participants noted that medication nonadherence can be viewed through the lens of unintentional or intentional. HCPs described unintentional medication adherence to be simply the patient forgetting to use the medication without real cause; in contrast, intentional medication nonadherence mainly aligned with patient refusal to comply with the prescription protocol.

Participants identified gross family income as a factor that induces medication adherence but was not a major factor because patients with this diagnosis would be able to access government-funded programs and free benefits. The key information to answer this question was not the availability of drugs but the ability of the patient to facilitate the use of the medication. Patient access to medicines is one issue and resources necessary for medication compliance is another. Participant 4 offered, "Family income contributes



to medication non adherence, low income family will likely cannot afford the medication.” Participant 30 said, “Patients from low income family will likely to practice medication nonadherence because they cannot afford the cost of the medication.” Finally, Participant 8 suggested, “Most African American psychiatric patients do not have good health care coverage or insurance.”

### **Summary**

In this chapter, I presented the study finding based on respondent participation in interviews to answer the four research questions. Some results confirmed factors previously established in the literature, whereas other results elucidated points not inherently observed in the previous review of literature. New findings, based on respondent feedback, also emerged. The next chapter provides an in-depth explanation and discussion of the results. Chapter 5 details discussion of the research questions, the implications for positive social change, and recommendations for future studies.

## Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this qualitative case study was to explore the perspectives or viewpoints of HCPs toward medication nonadherence among African American male psychiatric patients using gross family income, marital status, and age as sociodemographic factors in a Chicago-area hospital network. As established in literature, medication nonadherence—when patients do not take their prescribed medication as directed—is a clear hindrance to favorable health outcomes. Results of nonadherence may have severe consequences for patients with chronic conditions such as psychiatric disorders. Nonadherence ultimately underscores increasing issues of medical cost and patients' disease progression. Whether nonadherence is intentional or unintentional, this behavioral issue is a predictor of poor or diminished health outcomes, especially when a racial group or geographic entity is individually investigated.

This study was undertaken to explain HCPs' perceptions of medication nonadherence among African American male psychiatric patients. Understanding provider perceptions of the stigma involving psychiatric patients helps ameliorate this retributive medical condition. Because HCPs are major participants in providing quality care to patients, their opinions, attitudes, and perceptions can influence the quality and quantity of care they make available to patients (Henker et al., 2018). Furthermore, impressions of caregivers regarding patients influences clinical outcomes in a positive healthcare environment. Findings from this study evolved through interviews with 40 HCPs in a Chicago-area hospital network who met the inclusion criteria.

### **Interpretation of the Findings**

HCPs interviewed for this study were nurses, nurse practitioners, counselors/therapists, and physicians from a Chicago-area hospital network. Respondents to this study noted that the subject of psychiatric medical conditions, coupled with the uniqueness of African American male patients, makes this research an interesting topic. Copeland (2005) said that disparities already exist in healthcare outcomes for African Americans due to historical practices or policies and societal perceptions. In addition, African American patients hold more health risk factors than other racial groups. Hence, medication nonadherence is one of the barriers that affects effective healthcare delivery to this racial group.

### **Psychiatric Patients and Medication Nonadherence**

Like all cases of medication nonadherence, the stigma associated with psychiatric medical conditions complicates patients' ability to follow prescription protocols. Respondents noted HCPs have negative views of patients who suffer from psychiatric conditions. This stigma, according to study participants, leads to internalized shame about having this condition, causing some patients to ignore the diagnosis and engage in intentional medication nonadherence. Furthermore, negative beliefs, myths, and erroneous assumptions about patients who suffer from conditions that require psychiatric care induce patient shame, thereby leading to medication nonadherence. Due to stigma, perceived shame, and negative beliefs, historically, some patients have been unable to fully embrace their treatment directives, leading to medication nonadherence. For example, Participant 21 said, "Most people believe that patients with psychiatric

disorders are socially backward, violent, or could be dangerous, that's why most patients do not admit their diagnosis and fail to use their medication." Aligned with that notion, Participant 18 said, "Usually social stigma traps psychiatric patients and they will refuse to be compliant with their treatment plan." Participant also suggested, "Social stigma and discrimination usually make psychiatric patients to engage in medication nonadherence." Finally, Participant 26 opined, "Stigma usually make psychiatric patients to be reluctant to ask for help or to get the necessary treatment they require."

In further discussing psychiatric patients, Lacro et al. (2002) noted that HCPs' perceptions are necessary because whether unintentional or subtle, negative views or stereotypes can hinder patient-provider relationships, often leading to medication nonadherence. Stigma leads to discrimination, and discrimination negatively impacts healthcare delivery; hence, HCPs' perceptions need to be positive to prevent deterioration of patient conditions. Respondents in this study said that increasing efforts to eradicate stigma and eliminate myths involving psychiatric conditions are plausible means to prevent medication nonadherence in this population. As an example, Participant 4 averred, "Although the stigma abounds for psychiatric patients it can be eradicated with intensified education, awareness, and strong support system." Participant 40 though "Health care workers should not judge, label, or discriminate patients. Providers should treat all patients with respect, dignity and honor irrespective of their medical condition," and Participant 2 said, "Health care workers need consistent education, training, and support to help manage the existing bias towards psychiatric patients."

### **Uniqueness of African American Male Psychiatric Patients**

Psychiatric patients typically are able to manage their condition, recover fully, or lead normal lives if they get help and avoid medication nonadherence (Hyre, Krousel-Wood, Muntner, Kawasaki, & DeSalvo, 2007). Therefore, although African American male psychiatric patients may be challenged to adhere to medication regimens, their ability to normalize medication adherence is achievable if properly executed. HCPs who served these groups identified that African American patients, more than members of other racial groups, are more likely to miss medication or fail to comply with their treatment plan, based on socioeconomic factors. Health disparities affect African American male patients particularly and impede positive health outcomes. Respondents noted that cultural influences, perceived discrimination, and limited knowledge of their medical condition contribute to medication nonadherence in this African American male psychiatric patient population.

Study findings also showed that members of the African American community lack detailed information and misunderstand psychiatric conditions. In African American communities in the United States, patients with pronounced psychiatric conditions tend to have difficulties securing or holding a job, holding steady and long-term emotional relationships, and being socially inclusive. Patients in this population may be evasive about their diagnoses and refuse prescribed medication regimens. Study findings showed that African American society in general has stigmatized psychiatric conditions, as identified in responses answering Research Question 1. For instance, “Many Black patients do not fully understand what psychiatric conditions are and avoid talking about

it” (Participant 32) and “African American psychiatric patients have the misconception that psychiatric conditions are personal weakness” (Participant 36).

African American patients often seek spiritual activity rather than medical interventions to combat psychiatric conditions as alternative solutions. R. J. Taylor and Chatters (1991) reported that 85% of African Americans in the United States identify themselves as somewhat religious and use prayer as one coping mechanism in medical situations. Reliance on religion often hinders patients from seeking orthodox medicine, especially for psychiatric disorders. In 2001, the Office of the Surgeon General publicized that reliance on spiritual interventions sometimes leads to downplaying psychiatric conditions among African American male patients as a way to preserve personal ego. Participant 1 agree, “Some African American psychiatric patients use religion to respond to their condition and engage in medication adherence.” Participant 10 explained, “There is the myth that psychiatric disorders are an affliction and a punishment of precious wrong deeds from God.” and Participant 6 commented, “Some African American patients prefer to seek help from religious institutions while they practice intentional medication nonadherence.” Participant 10 also thought, “Spiritual practices are a strong part of treatment plan for African American patients.”

Respondents in this study mentioned that provider bias, intentional or unintentional, also play a role in medication nonadherence for African American male patients. Respondents noted that this bias is rooted in cultural competence, leading to poor health outcomes. Cultural misgivings cause mistrust in stratified healthcare facilities providing healthcare services to patients , and also induce medication nonadherence.

Inadequate provider communication and education with African American male psychiatric patients can also lead to medication nonadherence because patients lack necessary information regarding the side effects of medicines, the effectiveness of medications, and the safety of medications. Patients may have incorrect perceptions of medications. Psychiatric patients may lack the necessary understanding of why they are taking the medications, further exacerbated when HCPs do not properly explain the purpose and functions of the medications to patients. Furthermore, psychiatric patients who requires high drug regimens are usually more prone to nonadherence and unable to take their medications as prescribed, due to inadequately communication.

### **Socioeconomic Factors and Medication Nonadherence**

Psychiatric conditions do not discriminate based on race, gender, or socioeconomic factors. Anyone can experience the challenges of psychiatric illness, irrespective of their background. However, this study's findings confirmed that socioeconomic factors are indeed determinants of medication nonadherence in African American male psychiatric patients.

Based on gross family income and on an aggregate level for all U.S. families, African American families are relatively poor (Office of the Surgeon General, 2001). In their report, the Office of the Surgeon General further stated that 22% of African American families reported family incomes below the poverty line compared to other racial groups. Furthermore, mental health conditions are likely associated with those who live around poverty than those with broader income spectrums. Although poverty rates continue to shrink as the years progress, the distribution of wealth grows more complex

and diversified. As family income becomes a vital socioeconomic factor, family income should not be a strong determinant of access to medication and adherence.

On average, 30% of African Americans with mental illness seek medical help, compared to the U.S. average of 43% (D. R. Williams & Williams-Morris, 2000). Hence, rather than use income as a solid block in explaining medication nonadherence, the ability to access health care services seems more prevalent in the African American population. Participant 4 concurred: “Family income contributes to medication nonadherence because low income family will likely not be able to afford the cost of medication” and Participant 30 thought, “Patients with psychiatric disorders should be able to access government funded programs and benefits.”

Patients who are married are more likely to avoid medication nonadherence because they have family support that encourages and supports medication compliance. A married patient or one cohabiting with a partner is likely to be more medication compliant compared to patients living alone. A possible explanation is that married patients have significant partners who encourage them to use their medication and help them remember, in the case of unintentional medication nonadherence. Patients living alone are at greater risk of medication nonadherence. Study findings to answer this research question suggested that although marital status was not a significant individual predictor of medication nonadherence, unmarried African American male psychiatric patients were more likely to be medication nonadherent. For example, Participant 33 said, “The level of medication nonadherence is lower in married patients.” Put another way, Participant 30 indicated, “Relationship status of patients has an effect in mediating



medication nonadherence.” Finally, Participant 14 agreed that “Married patients will have someone to remind them to take their prescription medication compared to unmarried patients.”

In this study, I discovered that difficulty with medication adherence is common to all age groups and can happen to anyone. However, older adults may have more difficulty adhering to their prescription plan. Black et al. (1997) identified that 58% of older African American patients with mental disorders do not receive care and are prone to medication nonadherence. This is because members of the aging population (aged  $\geq 65$  years) often take more than one prescription medication, thereby finding it challenging to keep up, which can lead to medication nonadherence. In particular, 40% of older adults take five or more prescription drugs per day (Black et al., 1997).

In the older generations, factors such as lower cognitive function, memory loss, multiple health conditions, and medical history could cumulatively induce medication nonadherence. Members of older generations are more encumbered with issues of life, finances, shelter, and food, and may be less compliant in pursuing medications. Study findings showed that although age is not an independent determinant of medication nonadherence on African American male psychiatric patients, older adults who take multiple medications are more likely to indulge in medication nonadherence. By way of example, Participant 1 said, “Older patients are more likely to use their prescription medication if it has easy dosing schedule but more likely to comply if it involves complex dosing schedule.” Participant 12 also thought “Older patients have problems with dosing frequency and refilling their prescription promptly.” Participant 19 observed

that “Older patients are always afraid of adverse effect of the drugs and they have a fear for using the medication.” In contrast, Participant 35 said, “I don’t think age plays a part in determine medication nonadherence in African American male psychiatric patients.”

### **Key Findings**

Based on responses received during study interviews, participants agreed that medication nonadherence is a national epidemic in the African American community that contributes to poor health outcomes. Participants’ responses showed that, indeed, socioeconomic factors induce how patients fare in relation to medication compliance. A summary of key findings for this study follows: Intentional medication nonadherence is prevalent among African American psychiatric patients because of their lack of information resources and limited health literacy/education. The lack of effective and in-depth communication methods between psychiatric patients and HCPs influences medication nonadherence in this population. Patients who require high drug regimens are more prone to medication nonadherence and unable to take their medication as prescribed. African American patients hold cultural and historical perceptions of psychiatric disorders, types drugs/medicines, and overall treatment options that are not rooted in science. The stigma associated with using psychiatric medications for an extended period of time induces medication nonadherence. Cultural competence for HCPs is important in treating African American male psychiatric patients, with a need to adapt to this racial reality to ensure favorable health outcomes. Sometimes health care workers face weak capacity of the healthcare system to properly educate African American patients and provide the necessary treatment. Medication nonadherence does

not appear to be solely influenced by a single socioeconomic factor. A magnitude of variables can serve as determinants of medication nonadherence, based on the uniqueness of the race of patients. Health care workers' perceptions need to be positive about psychiatric patients to prevent difficulties in providing care.

### **Limitations of the Study**

This study was limited to describing participants' perceptions of medication nonadherence in African American male psychiatric patients in a Chicago-area hospital network; that is, I only sampled respondents from caregiving institutions in a Chicago-area hospital network. Another limitation is the uneven participant ratio based on job function. In the 40-participant pool, the ratio of nurses to nurse practitioners to counselors and physicians was not evenly distributed. However, for this study, this variation did not present any limitation in their experience and competence to answer the interview questions.

As the interviewer, my experience as a caregiver to the target population empowered study respondents to openly and truthfully answer the interview questions. In addition, this study was limited to responses provided, aligned with participants' perceptions. Respondents provided their perceptions based on their job experience with African American male psychiatric patients, working in Chicago-area hospitals. However, some participants provided responses based on their entire work experience outside of the Chicago-area hospital network, including previous job locations. This might be considered a limitation. However, because participants answered the interview questions truthfully, based on their perceptions and not generally restricted to any

particular geographical area, the limitation is insignificant. Overall, as the researcher, I believe that all participants answered the interview questions truthfully and to the best of their knowledge, based on meeting the study inclusion criteria.

### **Recommendations**

This study investigated the perceptions of HCPs about African American male psychiatric patients. I recommend further studies investigate the same perceptions about African American female psychiatric patients. Some variations may arise in how health workers perceive male patients compared to female patients. Researchers answering this recommendation will aid in understanding how HCPs perceive African Americans in general (men and women). Second, I recommend moving this study to another geographical area and using a broader geographic spectrum of participants. Opening the study concept to a national scope might elicit information particular to members of the African American race, particularly for psychiatric patients.

Furthermore, a study that compares psychiatric disorders to other chronic medical conditions might be plausible. Such a study could uncover if similar chronic medical conditions are determinants of medication nonadherence in the same capacity for African American patients. For example, a study comparing those with diabetes, ulcers, or cancer to those with psychiatric disorders might aid in understanding how patients who indulge in medication nonadherence behave, based on medical condition.

## **Implications**

This study evaluated the perceptions of HCPs on African American male psychiatric patients regarding medication nonadherence. Findings from this study confirmed that disparities exist in health delivery to African American male psychiatric patients and immediate solutions are required to improve services to this group. The findings answered how and why health caregivers perceive African American male psychiatric patients to be medication nonadherent. Providers' perceptions are essential to offering caring and compassionate care and this manner of care can influence medication compliance. The first implication for social change is that this study identified that healthcare workers have a vital need to develop and intensify educational and informative programs to align with the specific needs of African American male psychiatric patients. Providers need to understand how to specifically cater to this group, based on identified factors that make African American male psychiatric patients different.

Providers need to enhance real-time communication and education not only with patients, but with society at large, aiming to eradicate stigma and unfounded myths regarding psychiatric disorders. The use of technological applications for patients to manage their medications can be promoted to improve unintentional medication nonadherence. Also, reward and appreciation systems would encourage patients to follow their medication directions. A reward system can provide motivation for patients to use their medications as directed.

## Conclusion

The purpose of this qualitative case study was to explore the perspectives or viewpoints of HCPs involving medication nonadherence among African American male psychiatric patients using gross family income, marital status, and age as sociodemographic factors in a Chicago-area hospital network. The results of this study described providers' viewpoints on medication nonadherence and their influence on effective healthcare outcomes for African American male psychiatric patients. This study emphasized the need for providers to cater to African American patients due to the inherent risk factors particular to this race. Although medication nonadherence was observed to be higher among African American male psychiatric patients compared to other patients, medication nonadherence does not appear to be solely influenced by one socioeconomic factor; a magnitude of variables can serve as determinants of medication nonadherence, based on the uniqueness African American patients.

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## Appendix A: Interview Questions

Date: \_\_\_\_\_

Location: \_\_\_\_\_

Name of Interviewer: \_\_\_\_\_

Interview # \_\_\_\_\_

1. How many years have you been a Health Care Provider?
2. How many years have you been a Health Care Provider to African American Psychiatric male patients?
3. Participant gender: \_\_\_\_\_ Female \_\_\_\_\_ Male.
4. What category of Health Care Provider are you?
5. How confident are you to answer questions concerning African American Psychiatric male patients?
6. What in your opinion are some of the causes for medication non adherence in African American Psychiatric male patients?
7. Can you describe any barriers that you have encountered when dealing with African American Psychiatric male patients?
8. Why do you feel African American Psychiatric male patients engage in medication non adherence?

9. What are your guidelines for categorizing a patient as non-complaint to medication?
10. How do you encourage African American Psychiatric male patients to be medication compliant?
11. What are the perceptions of health care providers to age as a determinants of Medication Adherence among Psychiatric African American Male Patients?
12. What are the perceptions of health care providers to marital status as a determinants of Medication Adherence among Psychiatric African American Male Patients?
13. What are the perceptions of health care providers to gross family income as a determinants of Medication Adherence among Psychiatric African American Male Patients?
14. Do you think HCPs have enough training and knowledge to adequately care for African American Psychiatric male patients?
15. Is there anything else you feel you would like to say that will help me understand the subject of medication non adherence in African American Psychiatric male patients?



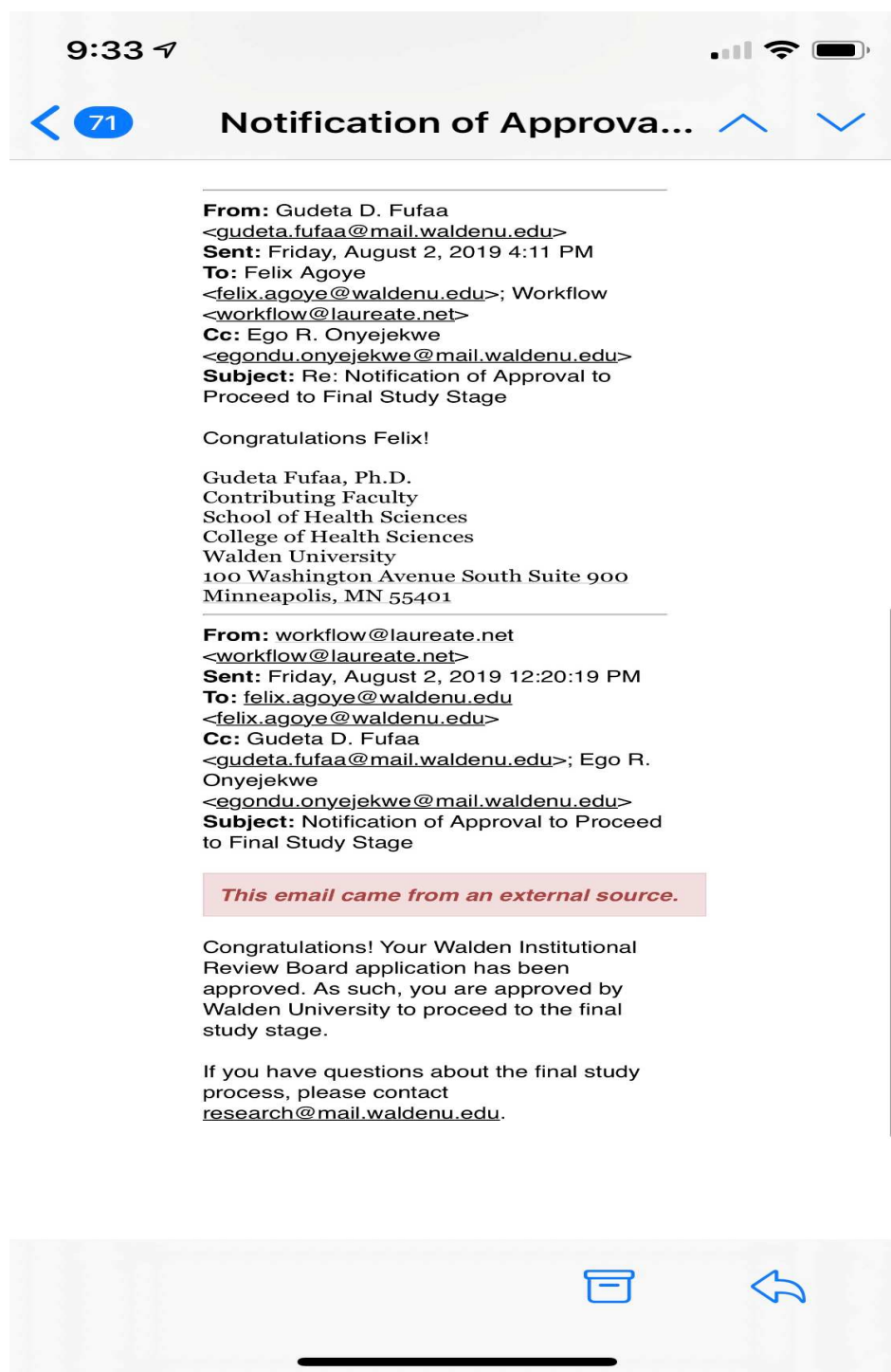
## Appendix B: Interview Protocol

All interviews were in person semi-formal discussions. All interviews were audio recorded

1. The study proposal was discussed with each prospective participant
2. The informed consent process was shared with each prospective participants and a verbal consent is made from prospective participants to commence the interviews
3. I also informed each participant that I am only interested in an honest feedback and learning about their true experiences working with the target population
4. At this stage, I asked if the participants had any questions or concerns before we commenced each interview.
5. I started the interview session and ensured to take the audio recording of the entire conversation with each participant.
6. At the conclusion of the interview, I reviewed the recordings with each participant alongside my hand written notes.
7. I asked the respondents for referrals to suggest the names of other potential participants in their professional circle that may also be interested in the study, I also informed them that they have the right to decline to provide this information.

8. At this staged, I thanked the participants for their time and effort to participate
9. I stopped the interview and communicated the next steps in the process to the participants
10. I will ended the audio recording at this time

## Appendix C: IRB Approval Letter



## Appendix D: Recruitment E-mail

Please Share Your Expertise as a health care Provider for African American Psychiatric male patients' medication non adherence. I am Felix Agoye and I am a doctoral candidate at Walden University. I am in the process of seeking participants to volunteer in a doctoral research study. The purpose of this research is to explore perspectives of health care providers to Medication Nonadherence among Psychiatric African American Male Patients within the Chicago area hospital network.

I am cognizant of the fact that your time is valuable to you and I appreciate your consideration to engage in this study. To get your opinion for this study, we need to meet for a brief interview of approximately 30 (thirty) minutes. This interview will be at a time that is most convenient for you. The interview can be held at a location of your choice in private and without interruptions. The meeting can also be done by phone/video conferencing (Skype) considering your flexibility. The interview meeting is designed to simply get more information about your experience as a health care provider treating African American male psychiatric patients. Participation is voluntary and all information will be kept strictly confidential. Also you would be anonymous and no information about you would be included in the study report. If you are willing to participate in interview meeting, please contact me by phone at xxx to schedule an interview time that is convenient for both of us.

Sincerely,

Felix Agoye

Doctoral Candidate Walden University