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## Health Beliefs and Nonadherence to Prescribed Medication Among African Americans Diagnosed with Hypertension

Monique D. Porter  
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Walden University

College of Health Professions

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Monique Dionne Porter

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Walden University  
2021

Abstract

Health Beliefs and Nonadherence to Prescribed Medication Among African Americans  
Diagnosed with Hypertension

by

Monique Dionne Porter

MPhil, Walden University, 2020

MHA, University of Phoenix, 2012

BIS, Oakland University, 2008

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Health Professions

Walden University

August 2021

## Abstract

Perceptions of high blood pressure among African Americans and medication nonadherence contribute to worsening cardiovascular disease compared to other racial groups; thus, they may suffer an increased lack of control of hypertension due to their subjective health beliefs. This study aimed to uncover health beliefs that result in nonadherence to medication advice, building on existing research associated with high blood pressure disparities despite recommendations for high blood pressure medication use. In this qualitative phenomenological study, the health belief model was used to identify the health beliefs of 12 African American patients with hypertension who were non-adherent to taking their prescribed medication. Research questions sought to expose the health beliefs and significance related to the beliefs of African Americans in maintaining control of their high blood pressure. Data collection included digitally recorded, open-ended, semi-structured interviews. As the result of thematic analysis, seven themes emerged: (a) trust, (b) self-efficacy, (c) denial, (d) relationships, (e) autonomy, (f) severity, and (g) physiological reactions. Participants self-identified that obstacles and beliefs played a significant role in their non-adherent behavior and that preserving their health was vital. Results indicated that patients were ready to act autonomously, and that adherence was essential in maintaining their health. This study may influence positive social change by encouraging relevant public dialogue among high blood pressure patients, policymakers, and healthcare professionals who work collaboratively and make decisions.

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## Dedication

This dissertation is dedicated to patients who live with chronic conditions—your health beliefs matter. I encourage you to continue to advocate for yourself. To verbalize your experiences and to stay involved and immersed in your health.

I dedicate this to my mother and father for supporting me spiritually, mentally, and physically and my grandmothers, whose prayers I am grateful for.

## Acknowledgments

With God, All Things Are Possible (Matthew 19:23-30). For I know the plans I have for you,” declares the LORD, “plans to prosper you and not to harm you, plans to give you hope and a future (Jeremiah 29:11).

I would like to thank God for everything. Through it all, I am able. Lord, I thank you. I will always praise your name.

I would like to acknowledge my God Mother (rest in peace), my Mom and Dad, Aunts, family, and friends. I could not have done this without your unwavering support.

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I would like to acknowledge my committee members, Dr. Kimberly Dixon-Lawson, Dr. Gabrielle Rude, and Dr. Kenneth J. Feldman; your knowledge, guidance, and support are greatly appreciated.

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## Chapter 1: Introduction to the Study

Six in 10 Americans live with a chronic illness, such as cancer, diabetes, high blood pressure, or mental illness (Centers for Disease Control and Prevention [CDC], 2019), and more than \$3.3 trillion is spent yearly to help provide health care for individuals with chronic diseases (Bernell & Howard, 2016; Bosworth et al., 2011; CDC, 2019). Further, thousands of deaths occur in the United States each year resulting from poor medication adherence in individuals with chronic diseases (Bilger et al., 2019; Bosworth et al., 2011; Brown & Bussell, 2011). Fifty percent of patients diagnosed with chronic diseases do not adhere to or take medicines as prescribed (World Health Organization [WHO], 2014). Nonadherence to taking prescribed medications may result in increased patient susceptibility to developing emergent health problems and additional healthcare costs (Brown & Bussell, 2011; Jimmy & Jose, 2011). For instance, failure to take prescribed blood pressure medication resulted in an additional 10% more patient hospitalizations (Bernell & Howard, 2016; CDC, 2018; National Health Council, 2016).

Among Americans, African Americans have a higher propensity for a high blood pressure diagnosis (CDC, 2017). But disparities between cultural groups in health care treatment, including access to medical care and the quality of care expected by African Americans, contributes to increased mortality and morbidity (National Center for Chronic Disease Prevention and Health Promotion, 2010; Pettey et al., 2016). However, African Americans are the least likely to be researched (Long et al., 2017). Although researchers have addressed some healthcare disparities, numerous areas related to health care access and the healthcare challenges faced by Africans Americans need scholarly attention

(Wasserman et al., 2019). Researching the specific health care challenges faced by African Americans is important not only for revealing their specific healthcare needs but also addressing the larger problem of healthcare disparities between racial groups in the United States. This chapter includes the background of this study, the problem statement, the purpose of this study, the research questions (RQs), the theoretical framework, the nature of this study, the most used terms (definitions), the assumptions of this study, the scope and delimitations, the limitations, the significance of this study, the implications for social change, and a summary of the chapter.

### **Background of the Study**

In the United States, more than 117 million Americans live with one or more chronic diseases (Brown et al., 2016; CDC, 2019). However, according to a report published by the WHO (2014), 50% of patients diagnosed with chronic diseases fail to adhere to prescribed medication instructions. Patients may fail to adhere to prescribed medication instructions for a myriad of reasons, including their personal health beliefs, physician related issues, and challenges stemming from the healthcare system (Brown & Bussell, 2011).

Understanding the consequences and causes of nonadherence to taking prescribed medication may help protect patients who suffer from chronic illnesses. In some cases, noncompliance to prescribed medication may be intentional (Jimmy & Jose, 2011). For example, some patients may stop taking their medication over time, whereas some patients may take half of their prescribed doses of a medication (Brown et al., 2016; Burns & Spivey, 2012; Park et al., 2018). Regardless, nonadherence to medication has

led to increased mortality and morbidity among affected African Americans (Burns & Spivey, 2012). Thus, it is important that Americans understand the consequences that may result from nonadherent behaviors.

One health care challenge that demands more research is the problem of identifying the health beliefs of African Americans with hypertension who are nonadherent to taking their prescribed medication. Common factors such as unemployment, poverty, inadequate access to healthcare, smoking, limited exercise, and obesity commonly create barriers to medication adherence for African Americans (CDC, 2019). The health beliefs of an individual also factor into medication adherence practices (Wasserman et al., 2019). It is likely that a convergence of health beliefs and health care system factors affect the ability of African Americans to adhere to prescribed medications (Wasserman et al., 2019).

Despite the indication that certain factors cause medication nonadherence among African Americans with high blood pressure, limited research exists regarding health beliefs that influence medication adherence behavior among African Americans (Hu et al., 2014). Past studies have identified the link between medication nonadherence and morbidity, but they have stopped short of providing an explanation for why patients do not follow medical instructions (Alsalman & Smith, 2013; Long et al., 2017). This study addressed this gap in research regarding nonadherence to taking prescribed medications among African Americans by examining the health beliefs of African Americans who share common nonadherence medication behaviors.

## **Problem Statement**

Nonadherence to medication prescriptions is one of many barriers African Americans face in achieving optimal health outcomes (Hu et al., 2014). African Americans have higher rates of cardiovascular morbidity compared to different racial groups because of nonadherence to high blood pressure medication (Petty et al., 2016). But there is a gap in the literature regarding the effects of the health beliefs of African Americans with hypertension concerning nonadherence to taking their prescribed medications and successful methods for improving medication adherence in African Americans. Thus, there is a lack of insight into the health beliefs that influence nonadherence to medication, which this study addressed by focusing on health beliefs and successful methods to improve medication adherence in African Americans. Recognizing patients' health viewpoints may help lead to a better understanding of the situations that can lead to morbidity, providing health care professionals with the best intervention options to help African American patients. Interventions aimed at improving medication adherence could aid in reducing the disparity gap among racial groups in the United States (Hu et al., 2014).

## **Purpose of the Study**

The purpose of this qualitative phenomenological study was to explore and gain an understanding of the health beliefs of African American patients diagnosed with hypertension who are nonadherent to taking their prescribed medication. The phenomenon explored for this study was how the health beliefs of African Americans with high blood pressure influence their prescribed medication taking behaviors and why



they do not adhere with prescription medication recommendations. Nonadherence to high blood pressure medication experiences may result from a variety of reasons. This study involved a case-by-case review of the viewpoints and experiences of participant patients' health beliefs.

### **Research Questions**

The RQs for this study included:

RQ 1: What are the health beliefs of African Americans patients with hypertension who are nonadherent to taking their prescribed medication?

RQ 2: How significant are the beliefs of African Americans with hypertension who are not adherent to taking their prescribed medication in maintaining control of their high blood pressure?

### **Theoretical Framework**

The health belief model (HBM) served as the theoretical framework for this phenomenological qualitative study. Social psychologists developed the HBM in the mid-20th century to address the failure of individuals to participate in programs designed to detect and prevent disease (Hochbaum, 1958).

Use of the HBM enabled the illumination of the health beliefs among African American patients who were nonadherent to taking prescribed medication. It is necessary to conduct research to identify and illuminate barriers that discourage patients from complying with prescription recommendations for treating high blood pressure. The HBM provided a structural map to pinpoint philosophies and ideas that exist in the health beliefs of African Americans patients with hypertension who are nonadherent to taking

their prescribed medication. In addition to illuminating factors that exist among patients who experience this shared phenomenon, the results of this study also provide insight into successful methods for increasing medication adherence among African American patients with hypertension who are nonadherent to taking prescribed medication.

### **Nature of the Study**

The method selected for this qualitative study was transcendental phenomenology. Transcendental phenomenology allows the researcher to disregard prejudgments by following predetermined steps to analyze data (Moustakas, 1994). Moreover, by using a phenomenological concept known as epoché, or bracketing, the researcher focuses on being open to receiving the experiences of the participants whenever a new phenomenon is heard or seen for the first time (Moustakas, 1994). The benefit of employing the phenomenological method is the ability of the researcher to explain the meaning, structure, and essence of participants' lived experiences relating to a specific phenomenon (Moustakas, 1994; van Manen, 1990). The use of phenomenology for this study provided a personal platform for African American patients with hypertension who were nonadherent to taking their prescribed medication to convey how their health beliefs influence their adherence to prescribed medications.

### **Definitions**

A few of the most used terms in this study are defined here.

*Adherence barriers:* Adherence barriers are barriers that inhibit in the ability of patients to actively participate in taking medications prescribed by their doctors.

Adherence barriers fall within five interacting dimensions, (a) condition-related factors,

(b) health care-related factors, (c) patient-related factors, (d) socioeconomic factors, and (e) therapy-related factors (WHO, 2003).

*African Americans:* African Americans is used interchangeably with Blacks depending on the context and reference to the background and refers to any Black person with origins in any Black racial group found in Africa (U.S. Census Bureau, 2018).

*Cardiovascular disease:* The term cardiovascular disease can denote several conditions, including chronic heart disease, heart attack, stroke, arrhythmia, heart failure, or heart valve conditions. In this study, the use of the term cardiovascular disease conveys the result of morbidity from high blood pressure, also referred to as hypertension (American Heart Association [AHA], 2019).

*Chronic diseases:* Chronic diseases are conditions that last longer than a year, often requiring ongoing medical attention, or those that often constrain the activities of daily living, or a combination of both (CDC, 2018).

*Condition-related factors:* Condition-related factors are the needs of the patient based on their condition and may include their level of disability, the severity of their symptoms, the availability of treatment options, and the rate of disease progression (WHO, 2003).

*Health beliefs:* Health beliefs are viewpoints that people consider about their health, what they think represents their well-being, what they consider are the sources of their conditions, and ways that they intend to endure unfavorable health illnesses (Misra & Kaster, 2015).

*Health care-related factors:* Health care-related factors include limited access to adequate care, high costs for prescription drugs, and challenges related to effective access of patient medication needs and history across medical venues (Brown & Bussell, 2011).

*Hypertension:* Hypertension is the term used in this study in place of cardiovascular disease. Hypertension or high blood pressure occurs when the force of blood against artery walls is both long-term and high enough to cause health issues (“High blood pressure (hypertension),” 2018).

*Medication adherence:* Medication adherence is the extent to which a person’s behavior—taking medication, following a diet, and or executing lifestyle changes—corresponds with doctors’ recommendations (WHO, 2003).

*Medication compliance:* Compliance refers to “the extent to which a persons’ behaviors, in terms of taking medications, corresponds with agreed recommendations from a healthcare provider” (WHO, 2003, p. 3).

*Medication nonadherence:* Nonadherence to taking prescribed medication occurs when patients (a) fail to begin a newly prescribed medication, (b) modify or skip doses, (c) take the prescribed drugs incorrectly, or (d) fail to take the medication because of misunderstood directions from the doctor (WHO, 2003; Witry et al., 2017).

*Medication noncompliance:* Noncompliance refers to intentional behaviors of an individual to ignore or refuse to follow suggested medical advice (Rao et al., 2017).

*Patient-related factors:* Patient-related factors are beliefs and attitudes, such as lack of understanding, lack of self-efficacy, and weak medical literacy that contribute to medication nonadherence (Spikes et al., 2019).

*Socioeconomic factors:* Socioeconomic factors that may influence medication adherence include illiteracy, level of education, unemployment, poverty, low socioeconomic status, lack of social support networks, unstable living conditions, location in relation to treatment center, as well as underlying culture and belief systems (WHO, 2003).

*Therapy-related factors:* Therapy-related factors refers to the types of treatment required to effectively treat a disease, as well as the duration of treatment, previous treatment failures, immediacy of relief from symptoms, treatment side-effects, and the complexity of the treatment procedures (WHO, 2003).

### **Assumptions**

This qualitative research study was based on three assumptions. The first assumption was that participants in this study would answer interview questions straightforwardly and truthfully. The second assumption was that each participant would follow through with the research study on their own accord. The third assumption was that each participant would have access to equal amounts of literature pertinent to their diagnosis of high blood pressure. The assumptions for this study were necessary because the nature of this study relied on direct data from participants of this study.

### **Scope and Delimitations**

The limited scope of this study included only African American patients with hypertension who were nonadherent to taking their prescribed medication living in urban communities in Michigan. The results of this study may not be generalizable to other ethnic and racial populations. The focus of this study was on the health beliefs of African

American individuals with high blood pressure that lead to nonadherence of prescription medication. Findings may be used to increase medication adherence among this population of African American patients with hypertension who are nonadherent to taking their prescribed medication.

### **Limitations**

Limitations of this study include the inability of the HBM to account for participants' individual determinants that may influence their behavior. The tenets of the HBM do not consider habitual behaviors, which may influence patient behavior regarding high blood pressure. Furthermore, the HBM does not consider that specific actions may occur based on social acceptability, or environmental and commercial determinants that may or may not promote the suggested behavior. Another limitation relates to a lack of knowledge concerning how prevalent these same beliefs are in people that are adherent to taking their prescribed medication as this is not a comparative study. The findings may not apply to all African American populations. Last, items such as health care coverage, access to care, and quality of care received were not quantified in this study and therefore were limiting factors. Reasonable measures to address limitations of this study were that the researcher kept in mind that all participants may not have experienced the phenomena in the same way as the other individuals involved in this study.

### **Significance**

The objective of this study was to identify health beliefs that may be associated with African Americans with hypertension not taking their prescribed medication. An awareness of the participants' health beliefs that lead them to neglect medication

instruction prescribed by their doctors could help prevent nonadherence, thereby reducing mortality and morbidity rates among African American patients with hypertension who are nonadherent to taking their prescribed medication. This study was significant because disease management appears to lack undeviating relevancy, such as in situations where affected individuals may not fully understand the impact that being health-literate means for them. In addition, researchers and health professionals need to identify not only chronic disease in practical settings but also the underlying reasons for medication nonadherence. Conducting continued research may provide health care professionals with more intimate health-related elements grounded in relevant African American experiences. Researchers and health care professionals acknowledging that medication adherence is of significant concern may help to provide an understanding of patients' resistance and values.

### **Implications for Social Change**

The positive social change implications from this study include raised awareness for health professionals, medical researchers, health care administrators, and educators regarding health beliefs that result in nonadherence to medical instructions. During this study, I engaged participants in relevant dialogue regarding decision making behaviors and ascertained their personal perspectives as members of a minority culture. There are social benefits to engaging those who create public dialogue about the disease and health promotion strategies most suitable to inform policymakers, stakeholders, health care professionals, and administrators who work together and make decisions (Bernell & Howard, 2016). Although many studies address social implications, there is still a need to

provide African American patients diagnosed with hypertension who are nonadherent to taking their prescribed medication and others who struggle with medication adherence with a greater understanding of the significance of appropriate medication compliance. Conducting this study provided African American patients the opportunity to share their health beliefs, which may enable them to improve their health outcomes individually.

### **Summary**

Chapter 1 provided an overview of this study from a qualitative phenomenological perspective. This aim of this study was to illuminate the health beliefs related to medication nonadherence behaviors among African American patients with hypertension who are nonadherent to taking their prescribed medication, which can help understand how health beliefs result in nonadherence to prescription medication instruction given by their doctors. Although disparities exist among high blood pressure patients, there has been little research that supported understanding the connection between the health beliefs of African American patients diagnosed with hypertension and their nonadherence to taking their prescribed medication. I addressed this gap by interviewing African American patients with hypertension who were nonadherent to taking their prescribed medication within urban communities in Michigan to elicit understanding regarding nonadherence behaviors. Chapter 2 provides an exhaustive analysis of the literature used to structure this study.



## Chapter 2: Literature Review

Failure to adhere to prescription medication recommendations has led to increased rates of mortality in African Americans when compared to those of other populations with high blood pressure (CDC, 2018). Despite the abundance of literature that addresses high blood pressure as a social phenomenon and social health risk, there was a limited amount of research into health beliefs that influence the medication-related behavior of African American patients with hypertension who are nonadherent to taking their prescribed medication (Hu et al., 2014). To increase understanding of this phenomenon, this study explored health beliefs that may predispose African American participants to nonadherence of prescribed blood pressure medication recommendations.

The literature review for this qualitative phenomenological study included investigation, synthesis, and analysis of research related to the health beliefs, attitudes, and viewpoints of African American patients with hypertension who are nonadherent to taking their prescribed medication. Using the HBM, I developed a comprehensive overview of medication nonadherence behaviors of African American patients with hypertension who are nonadherent to taking their prescribed medication. This chapter includes a thorough review of literature related to African American patients with hypertension who are nonadherent to taking their prescribed medication.

### **Literature Search Strategy**

The literature search conducted for this research study consisted of scanning multidisciplinary online electronic databases for work published within the last 5 years. To ensure a thorough review of the literature seminal pieces were also included.

Academic sources for this review came from the following databases: government databases, Google Scholar, Pharmaceutical databases, ProQuest Central databases, PubMed, Sage Journals, and Walden University. I reviewed approximately 100 articles found by searching with the following key terms: *barriers, behavior, blood pressure medication, compliance, cost, ethnic minority, health belief model, high blood pressure, health behavior, hypertension, medication adherence, medication intervention, medication safety, momentary assessment, nomenclature, nonadherence, noncompliance, patient, patient adherence, pharmacotherapy outcomes, positive adherence, and qualitative study.*

## **Theoretical Foundation**

### **Health Belief Model**

The conceptual framework for this study was the HBM. First developed in the 1950s by social psychologists Hochbaum et al. (1952), the HBM has informed other studies designed to explore and illuminate factors that might explain long and short-term health-related behavior patterns. According to Hochbaum et al., the HBM is a psychological model used to explain and predict human behavior. The HBM has been one of the most used frameworks in health behavior research and has been used both to describe variation and continuance of health-related behaviors as a lead basis for health behavior interventions (Champion & Skinner, 2008).

The purposes of applying the HBM is to (a) understand and explain health-related actions taken because of human influence, and (b) to explore such key characteristics (Champion & Skinner, 2008). It is these concepts that provide a platform for a human's

willingness and readiness to behave in a certain way in relation to health issues (Hochbaum et al., 1952). Use of the HBM can help predict why people actively prevent disease, screen themselves for illnesses, or take action to control disease conditions they may have (Champion & Skinner, 2008).

Based on the HBM, people are likely to comply with recommended actions that will reduce their health care risks if the following conditions are met: (a) the person regards themselves as susceptible to an illness, (b) believes that their condition could have potentially severe consequences, (c) deems that a sequence of actions are obtainable, (d) believes that the actions would be beneficial in reducing either their susceptibility to or severity of the condition, and (e) trusts that the anticipated benefits of taking action overshadow the barriers (Champion & Skinner, 2008). For this study, these conditions may have determined whether African Americans would comply with medication-adherence behaviors. For example, African American patients with hypertension who are nonadherent to taking their prescribed medication may be less likely to adhere to prescription medication recommendations if they do not regard themselves as susceptible to morbidity from nonadherence to medication, fail to believe that nonadherence to medication may lead to potentially serious consequences, do not understand that failure to comply with medical instruction may increase their susceptibility to the severities of their conditions, and do not believe that the anticipated benefits of adhering outweigh challenging barriers.

## **Key Constructs of the HBM**

There are six key constructs in the HBM. The first construct of the HBM is perceived susceptibility, which is defined as having beliefs concerning the chances of experiencing a risk or getting an illness or ailment (Champion & Skinner, 2008). The second key construct is perceived severity, which includes having beliefs about how severe a risk or condition is and consequences are to follow. The next key construct is perceived benefit, which is defined as beliefs in the ability and power of the recommended action to reduce probability of seriousness of impact. The fourth key construct is perceived barriers, which includes having beliefs about the substantial and psychological costs of the recommended action. The fifth construct is cues to action, which includes approaches to trigger readiness. The sixth and final key construct to the HBM is self-efficacy, which is defined by having beliefs that stimulate confidence in the ability to act.

Research has indicated that there are relationships between the HBM constructs (Hochbaum, 1958). If patients exhibit favorable beliefs regarding susceptibility and benefits, as well as a belief in potential consequences, followed by the belief that a course of action would benefit them, this results in a belief that taking actions might reduce their risks. Patients are more likely and inclined to act toward improving their health if they have a better understanding of the risks and the efficacy of the steps, they could take to protect themselves. Further, some factors such as knowledge and sociodemographics might modify the variables that affect health-related behavior. In some situations, there may be a combination of views that lead to behavior, and individuals may combine

perceived susceptibility and severity to identify potential threats (Champion & Skinner, 2008). Therefore, I considered socioeconomic factors, health care-related factors, therapy-related factors, condition-related factors, and patient-related factors, as elements of the health beliefs that might modify the model constructs.

Other research conducted using the HBM has also shown that medication nonadherence statistics vary by diagnosed chronic disease, individual patient characteristics, and insurance accessibility (Willis, 2018). Nonfinancial obstacles, disease-related awareness, health literacy, and polypharmacy have a significant role in medication nonadherence behaviors. Behaviors also occur based on the severity of illness. In terms of the HBM, patients change their behavior by taking action to reduce pain, which helped to potentially avoid further negative health conditions in the future.

Similar to the current study, research has also focused on medication adherence among patients using the HBM. Yazdanpana et al. (2019) conducted a study using the HBM to determine the effects of implementing an education program on the adherence practices of individuals with hypertension aged 60 and older and found indicated that the participants who received education increased their medication adherence. Similarly, Zullig et al. (2016) researched patient beliefs regarding high cholesterol and medication adherence and discovered that education regarding the risks associated with cholesterol would increase medication adherence. Other research suggested that failure to take prescribed medication for patients with chronic conditions is more common among patients with low-socioeconomic status, but addressing daily practices using technology may help (Hincapie et al., 2019).

## Literature Review

### High Blood Pressure

In the United States, high blood pressure is a major contributor to chronic diseases that have led to steadily increasing associated costs of more than \$80 billion (AHA, 2018; Lackland, 2014). Although many Americans have high blood pressure, high blood pressure has affected more than 40% of African Americans (AHA, 2018). Middle-aged and senior African Americans receive diagnoses of high blood pressure in higher numbers than their White counterparts (Petty et al., 2016; Weiz & Grob, 2016). High blood pressure is a significant risk factor that has resulted in deaths in the African American community, which may be due to low medication adherence (Ferdinand et al., 2019). One reason that may explain the higher rates of medication nonadherence among African Americans is that African Americans often have beliefs that differ from other racial groups regarding the specific causes of and methods for controlling hypertension (Spikes et al., 2019).

### High Blood Pressure Among African Americans

High blood pressure is the prominent cause of cardiovascular disease in the United States and affects 29% of adults, or 80 million patients. When compared to other racial groups, African Americans show significantly higher incidences of hypertension and related comorbidities (Petty et al., 2016; Zilbermint et al., 2019). Furthermore, the occurrence of uncontrolled high blood pressure is increasing among African Americans (Petty et al., 2016). High blood pressure, a risk factor for cardiovascular disease, affects more than 77.9 million adults in the United States, and African Americans receive high

blood pressure diagnoses more frequently than other racial groups (Ford et al., 2016).

High blood pressure has increased in prevalence in the United States, and more than 40% of African Americans have high blood pressure (AHA, 2016).

Researchers suggest that perceptions of high blood pressure among African Americans and medication nonadherence contribute to worsening cardiovascular disease (Petthey et al., 2016). Patients who exhibited no symptoms of high blood pressure did not adhere to medical instruction, though it could improve their quality of life (Petthey et al., 2016). More research is still necessary to understand nonadherence among African American patients diagnosed with hypertension who are nonadherent to taking prescribed medication. By examining African Americans' health beliefs concerning medication adherence through interviews, researchers may uncover data necessary to construct specific interventions to improve medication adherence among at-risk populations (Petthey et al., 2016).

### **Common Contributors**

Compared to other racial groups, African Americans reportedly lack positive medication-adherence behaviors and are often reluctant to share their vulnerabilities even when provided platforms for doing so (Brown et al., 2016). However, there is a disproportionately small number of studies investigating methods to improve medication adherence for African Americans. Examining this phenomenon requires attention to the relevant factors and common contributors that influence adherence behavior among African Americans (Gamble, 1993). Diet, lack of family support, and lack of exercise are some of the most common contributors of high blood pressure in African Americans.

Stress, lack of understanding of the causes of high blood pressure, and prescription drug misconceptions about treatment are also commonly known to be associated with non-adherence to taking prescribed high blood pressure medication, which then contributes to high uncontrolled high blood pressure (Petthey et al., 2016). Differences in cultural perceptions of adherence to high blood pressure treatments may also affect high blood pressure rates (Petthey et al., 2016). For example, some African American patients may be influenced by their personal belief that prescribed medications are ineffective, resulting in prescription drugs to be untaken and causing increased lack of control of high blood pressure (Petthey et al., 2016).

### **Chronic Illness**

Chronic, noncommunicable diseases are not transmittable directly from one person to another (CDC, 2016). Since 2010, chronic, noncommunicable diseases such as asthma, inflammation, high blood pressure, diabetes, cancer, and epilepsy have been seven of the top 10 causes of adult deaths in the United States while also accounting for the majority of healthcare expenses (CDC, 2016; Weisz & Grob, 2016). Such diseases can last 1 or more years and affect more than 17.9 million people annually (CDC, 2016). These diseases may develop because of a combination of genetic traits, physiological consequences, or environmental/behavioral factors (CDC, 2016; Weisz & Grob, 2016). However, early detection of such diseases can reduce the need for expensive treatment, significantly improving the quality of life for patients.

Despite the importance of detection and treatment of chronic diseases, members of minority groups suffer disparities regarding chronic diseases like heart disease,



diabetes, cancer, asthma, autoimmune disorders, and other conditions (Wasserman et al., 2019). Health disparities are biased dissimilarities among groups in health care coverage, access to care, and quality of care received. Health disparities are particular types of health dissimilarities linked to a social, financial, or environmental detriment (Office of Disease Prevention and Health Promotion, 2010). For example, among socioeconomically disadvantaged individuals, many may have low levels of education, work jobs that are stressful and require heavy lifting, or live-in areas that may potentially pose significant vulnerabilities for their families compared with others in majority populations.

### **Medication Adherence**

Medication adherence, used interchangeably with medication compliance, refers to following provider recommendations for taking medication (WHO, 2003, p. 3), such as taking the right dosage at the right time (Lam & Fresco, 2015; Luga & McGuire, 2014). Compliance is the extent to which a patient's behavior aligns with the doctor's advice and patients receive classification regarding whether they are obedient or disobedient to the prescriber's authority (Jimmy & Jose, 2011). Medication adherence should typically be at least 80% of a treatment recommendation prescribed by the healthcare provider (Ulrik et al., 2012). Adherence signifies that both the patient and the doctor are working to improve the patient's health by incorporating the best judgment recommended by the physician (Jimmy & Jose, 2011).

Adherence is multifaceted and the key to therapeutic success (Lam & Fresco, 2015). Adherence can be divided into three distinct stages known as (a) initiation, (b)

implementation, and (c) follow-through, all of which patients often delay or ignore. The foundation of this study aligned with adherence as it relates to the degree to which a persons' behavior adheres to suggestions from a healthcare provider. Adherent patients often alter their lifestyles to ensure adequate adherence to care recommendations (Jimmy & Jose, 2011). There is a need to improve medication knowledge aimed at medication adherence after receiving medical services (CDC, 2013; Miller, 2016; Wali et al., 2016). Therefore, it is important for patients to understand the significance of medication adherence to maintain their health and well-being.

### **Medication Nonadherence**

Nonadherence to taking prescribed medications significantly contributes to higher occurrences of morbidity and mortality in multiple situations (Petthey et al., 2016). Researchers found that not taking prescribed medication is a cause of wasteful spending in the United States, with chronic medical conditions among the leading expenditures of the nation's \$3.3 trillion in annual healthcare costs (Burns & Spivey, 2012). In addition, nonadherent patients are at risk of developing additional complications resulting from failing to adhere to prescribed medication recommendations. The WHO (2017) asserted that nonadherence can occur in multiple ways. For example, nonadherence may occur because patients fail to begin taking a newly prescribed medication, modify or skip doses, take the medicine prescribed incorrectly, or fail to take medication altogether as a result of misunderstood instructions from the doctor (WHO, 2017; Witry et al., 2017).

Compliance is defined as the patient's accepting of advice, whereas adherence relates to an act and implies behavior (Jimmy & Jose, 2011). The focus of their study was

to examine patient nonadherence, rather than noncompliance, classifying reasons for nonadherence into three main categories: (a) nonfulfillment, (b) no persistence, and (c) nonconformance. In nonfulfillment adherence, a doctor writes a prescription, but the patient never fills the prescription. In no persistence adherence the patient fills his/her prescription and begins taking it as recommended, but ultimately stops taking the medication without completing the course of treatment. In nonconforming adherence, patients alter their medication routines by skipping doses, taking their medicines at incorrect times (or in incorrect quantities), or refusing follow-up treatment/check-ups. For example, hospitalized patients might hoard medications or hide them in their mouths without ingesting them, thus misleading medical staff about medication adherence (Alsaman & Smith, 2013).

Researchers explored nonadherence with the aim of developing comprehensive patient planning, which might help high blood pressure patients. However, there is a need to research taking prescribed medication recommendations that includes the patient's perspective (Cuffee et al., 2013; Gagnon et al., 2017; Horne et al., 2013; Pettey et al., 2016; Shamsi et al., 2017; Thorneloe et al., 2017). Shamsi et al. (2017) found that research regarding patient perspective may be essential in solving adherence problems for patients. Likewise, additional researchers focused on uncovering reasons for patients' nonadherence despite their physicians' medical advice (Cuffee et al., 2013; Gagnon et al., 2017; Horne et al., 2013; Pettey et al., 2016; and Thorneloe et al., 2017). These researchers focused their concerns around taking medication, which could be essential in discovering answers needed to solve medication adherence problems.

In 2017, researchers conducted a study that surveyed 343 participants (Gagnon et al., 2017). The questions in the survey related to beliefs about medicine and external barriers to adherence. The results of their study showed that more than 54% of patients admitted to nonadherence in taking their prescribed medications, with 51% of patients having at least one identified barrier to adherence, and 52% of patients sharing aversions to medications.

### **Consequences of Nonadherence.**

Nonadherence to following prescribed medication routines results in poor healthcare outcomes, more frequent hospital visits, and increased mortality rates. Studies in the United States report that approximately \$100 to \$300 billion dollars of preventable associated costs, roughly 3% to 10% of total yearly healthcare costs, have resulted from medication nonadherence (Luga & McGuire, 2014). Nonadherence often results from barriers preventing patients from adhering to medication advice and making favorable outcomes unlikely (Willis, 2018). Additionally, nonadherence results in wasted medication, disease succession, abridged functional abilities, lower quality of life, augmented use of therapeutic supplies, and increased mortality rates (Jimmy & Jose, 2011). Statistics arising from studies conducted by the CDC (2013) have emphasized that nonadherence to taking prescribed medication may cause financial burdens for taxpayers.

Brown and Bussell (2011) conducted a review of relevant literature published between January 1990 and March 2010 and confirmed that medication-taking behaviors are multifactorial and vary in complexity. Researchers conducted a study and agreed that multiple barriers affect adherence to medication (Devine et al., 2018). Patient

nonadherence to taking prescribed medications is associated with poor health care outcomes, which can cause the progression of a chronic illness and contribute to avoidable health cost expenditures (Luga & McGuire, 2014). Improving medication adherence requires not only detecting barriers that impede compliance, but an operational development of strategies geared toward behavioral change, as nonadherence to medication is often private, which prohibits doctors or pharmacists from becoming aware of the patient's nonadherence (Kleinsinger, 2018).

### **Measuring Medication Adherence**

The WHO categorized approaches to measuring medication as either subjective or objective (Brown & Bussell, 2011; Lam & Fresco, 2015). They further asserted that subjective approach entails engaging patients, family members, direct care workers, and physicians specifically about a patient's medication use. An objective approach involves pill counting, electronic medication event monitoring, pharmaceutical monitoring, and evaluation of the presence of biological markers denoted in a patient's blood and urine (Brown & Bussell, 2011; Brown et al., 2016; Lam & Fresco, 2015). While objective measures are most accurate at measuring adherence, these measures have the disadvantages of being intrusive, expensive, difficult to obtain, and sometimes misleading (Lam & Fresco, 2015).

### **Barriers to Adherence**

There are several relatable factors that may suggest reasons why patients do not adhere to prescribed medication recommendations (Brown & Bussell, 2011). They identified the following five categories as contributing to poor medication adherence: (a)

socioeconomic factors, (b) health care-related factors, (c) therapy-related factors, (d) condition-related factors, and (e) patient-related factors. Patient-related factors were those considered for this study.

Brown and Bussell (2011) hypothesized that nonadherent patients may not understand their disease, may not want to involve themselves in making health related decisions, and may have a suboptimal understanding or medical aptitude. More than 90 million adults in the United States have insufficient knowledge regarding health. Researchers should therefore take into consideration patients' health beliefs and attitudes concerning their health beliefs, the effectiveness of treatment plans provided, patients' previous mindsets with prescribed medication therapies, and lack of motivation as affecting medication adherence.

### **Socioeconomic Factors**

Racial and ethnic minorities inexplicably live in environments that lack many of the resources necessary to sustain good health (Richardson & Norris, 2010). They described that within such segregated African American communities, for example, there can be substandard housing, abandoned buildings, industrial facilities within communities, and inadequate municipal services for assistance, including police and fire protection. Some minority areas may also include exposure to various toxins, carcinogens, and pathogens, leaving Blacks to deal with the effects or symptoms of exposure (Wasserman et al., 2019). Racial disparities may also help to explain health outcomes and chronic illness among hypertensive African Americans (Richardson & Norris, 2010). In some cases, hypertensive African Americans in such communities

might also have trouble paying for medication or getting to a pharmacy to pick it up, which can lead to nonadherence.

### **Healthcare-Related Factors**

Research has revealed that racial and ethnic minorities tend to have access to substandard healthcare (Egede, 2006). Although there is no one sole contributor to health disparities among minorities in America, adherence and nonadherence to healthcare guidelines and instruction is an essential factor contributing to health disparities (Wasserman et al., 2019). The researchers claimed that an understanding of how health care disparities occur and finding ways to eliminate them are paramount for future research, because disparities between Blacks and Whites regarding healthcare adherence is an area less explored than others. The design of this study was created to acknowledge the connections between the health beliefs of African American patients diagnosed with hypertension who were nonadherent to taking prescribed medication and their subsequent medication nonadherence.

Another component contributing to healthcare disparities among minorities is residential segregation. Residential segregation is the physical separation of races in residential settings (Betancourt et al., 2016). Although residential segregation is often an abandoned variable in 21st century conversation about racial disparities in healthcare, it has long been acknowledged as one of the most relevant factors in racial inequality in America. Although most immigrant groups have experienced some form of residential segregation within the United States, no one has experienced discrimination nor has lived under the extraordinary levels of separation that exist for the African American

population (Edebe, 2006). Differences in segregation, health status, and racial disparities are likely due to related policies and provisions that forced segregation on African Americans (Betancourt et al., 2016).

In the late 20th and early 21st centuries, however, there have been efforts made to decrease the level of racial and ethnic disparities in healthcare outcomes (Edebe, 2006; Wasserman et al., 2019). Yet, patients who are from a lower socioeconomic level are still less likely to be insured or have access to essential care (Griffith et al., 2017). Subsequently, patients without adequate insurance often avoid medical care due to costs associated with treatment, especially upon entering a hospital (Wasserman et al., 2019).

There has been little scholarly investigation of why patients, even those with access and insurance, still choose not to adhere to medication instructions (Griffith et al., 2017). As of January 2014, under the Affordable Care Act, at least 25 states had implemented options that offered Medicaid, thereby providing access to healthcare including subsidies to supplement premiums and making insurance more affordable for minorities (Wasserman et al., 2019). However, 25 states chose not to expand Medicaid through the Affordable Care Act.



### **Condition, Therapy, and Patient Related factors**

Condition Related factors are illness-related factors and difficulties faced by patients. Some strong determinants of adherence are related to the severity of the symptoms, level of physical, mental, societal, and job-related, and availability of effective treatments (Chiu et al., 2014). The impact on patients depends on how health care professionals influence patient's risk perception, the importance of the following treatment, and the priority placed on adherence. Therapy-Related factors relate to the intricacies that involve medical procedures, length of treatments, previous treatments failures, recurrent changes in treatment. Patient-Related factors refer to the resources, understanding knowledge, attitudes, beliefs, perceptions, and patient expectations. These factors related to this study as the focus used to explore the influence of African American patient's health beliefs on prescribed medication adherence or nonadherence.

### **Patient Beliefs and Attitudes**

Gagnon et al. (2017) compared attitudes and beliefs regarding medication adherence and discovered that negative patient beliefs adversely impact positive medication adherence and advantageous behavior. Additionally, healthcare providers frequently have little understanding regarding their patients' beliefs regarding health (Hu et al., 2014). Patient beliefs can serve as predictors of nonadherence in cases of chronic disease, such as hypertension (Kennedy et al., 2017; Pettey et al., 2016). It was also suggested that a better understanding of patient beliefs and attitudes related to their adherence behaviors is necessary to address nonadherence (Kennedy et al., 2017). The

purpose of this study was to understand patients' health beliefs that form the foundation of the medication nonadherence phenomenon.

In a cross-sectional study of patients diagnosed with asthma, researchers found that patients' perceptions are significant predictors of medication adherence (Chiu et al., 2014). Patients were asked to complete a 12-question survey directly related to health beliefs and behaviors. The researchers discovered that patients' beliefs and attitudes affected their understanding of the disease, how to use medications prescribed to them, acceptance of their diagnosis, and safety regarding their condition.

In situations where patients feel inclined to adhere to medication advice, favorable outcomes are achievable. Studies conducted by multiple researchers showed common barriers, such as patient psychological incompatibilities, attitudes and beliefs, distrust, and cultural disparities affected adherence to prescription medication recommendations. The studies confirmed that patient individual beliefs and health beliefs had a significant role in adherence to medication instructions (Devine et al., 2018; Najimi et al., 2018).

A belief is something accepted, considered true, or held as an opinion (Hu et al., 2014). Beliefs and attitudes influence healthcare providers' communication and decision-making, as well as patients' medication adherence (Kennedy et al., 2017). Exploring beliefs and attitudes and formed patients' health beliefs, toward medication could contribute to improved adherence among patients with hypertension.

### **Psychological Barriers**

Psychological barriers related to the onset of high blood pressure can significantly reduce a patient's capacity to comply with medication instructions (Najimi et al., 2018).

A patient might be psychologically resistant to eating healthfully, exercising, and taking medications (Alpers, 2017). He or she might opt for more natural or homeopathic treatment. Some hypertension patients suffer bouts of depression, fatigue, dissatisfaction with medication and its side effects, or are simply ignorant of the severity of the illness and the disadvantages of not seeking treatment (Najimi et al., 2018). Any of these factors can be a barrier to adherence, causing patients to take medication inconsistently or not at all. Over time, avoidance behaviors can cause some patients to abandon medication altogether (Weiz & Grob, 2016).

**Distrust of Medical Personnel.** Medical patients must trust their doctors and nurses to act in their best interest. Such trust is likely to lead to increased medication adherence on the part of the patient (Alpers, 2017). Within the last 40 years, however, trust in healthcare professionals has declined (Armstrong et al., 2007). This decline in trust stems from frequent ethical violations, medical malpractice, fraud, security breaches, and abuses within the healthcare system (Armstrong et al., 2007). Patients who have had uncomfortable health beliefs with healthcare providers tend to remember and to be apprehensive of receiving healthcare that they need (Devine et al., 2018).

Trust makes patients vulnerable to and dependent upon physicians and other healthcare professionals (Alpers, 2017). Patients may worry that challenging professionals' decisions might offend them or appear disrespectful, resulting in patients accepting treatment programs or prescriptions but failing to adhere to the medical instruction (Betancourt et al., 2016). Distrust of healthcare professionals is more common among African Americans and other minorities than it is among patients in general

because of the history of adverse treatment of Blacks by the American medical system.

Thus, African Americans are more likely to shy away from healthcare (Armstrong et al., 2007).

Armstrong et al. (2007) discovered that African Americans have higher levels of medical distrust than do other racial groups (Armstrong et al., 2007). Levels of distrust vary according to geographical location, socioeconomic status, gender differences, income disparity, degree of segregation, disability, and presence/absence of medical insurance (Betancourt et al., 2016). Minority patients might also refuse recommended treatment because of a poor cultural match between them and their providers (Gagnon et al., 2017). Some patients might also not fully understand medical instructions (Thorneloe et al., 2017). For these and other reasons, African Americans have an elevated death rate for eight of the 10 most diagnosed illnesses (Betancourt et al., 2016).

### **Nonadherence to Hypertension Medication Among African Americans**

African American hypertension patients show elevated nonadherence rates in comparison to those of other patients. Past studies confirmed that African Americans suffer from the comorbidities of high blood pressure because of non-adherence (Bernell & Howard, 2016). In addition, African Americans who are nonadherent to prescribed hypertension medications are often also nonadherent with other healthcare instructions (Kennedy et al., 2017).

African American patients with hypertension who are nonadherent to taking their prescribed medication might have health beliefs that influence their nonmedication adherence to high blood pressure behaviors, which may result in low or inconsistent

adherence and aggravated symptoms. Additionally, inconsistent adherence and aggravated symptoms often occur in cases where the patient has little social support (Kennedy et al., 2017). The stress of minority status and social inequality can lead to depression among African American patients (Spikes et al., 2019). Such depression also works as a barrier against medication adherence (Bernell & Howard, 2016).

Nonadherence behavior might weaken patient treatment plans, lead to inconsistent medical patient management, or result in unintended antagonistic outcomes (Kleinsinger, 2018). Unfortunately, which patients will display nonadherence behaviors is a mystery unexplainable by healthcare professionals (Alsalman & Smith, 2013). It is essential to understand that decisions to follow recommended treatments may help aid patients in better health care outcomes (Chiu et al., 2014). Patients adhere to prescribed medications only when they believe that treatments will benefit them rather than harm them (Alsalman & Smith, 2013).

### **Summary**

Chapter 2 began with an introduction and a review of the literature search strategy and keywords used, followed by a discussion about the HBM and its applicability as the theoretical framework for this study. A comprehensive overview of the literature followed, including a discussion about high blood pressure in African Americans, chronic disease, medication adherence and nonadherence, barriers to adherence, and nonadherence to taking prescribed hypertension medication in African Americans. The goal of this study was to explore issues related to hypertension medication nonadherence among African American patients with hypertension who are

nonadherent to taking their prescribed medication. The results of this literature review revealed that there was a gap in the research regarding how the health beliefs of African American patients with hypertension who are nonadherent to taking their prescribed medication influence their nonadherent behaviors.

A review of the literature revealed that there was a need for a platform for African American patients with hypertension who are nonadherent to taking their prescribed medication to share health beliefs that have contributed to their distrust of the medical health system. Additionally, disparities exist between Whites and African Americans, the latter of which suffer from illness and mortality due to nonadherence to hypertension medication in greater numbers than other racial groups. African Americans are 50% more likely to be nonadherent to hypertension medication and noncompliant with their doctors' advice (Armstrong et al., 2007). Thus, many African Americans continue to live with untreated high blood pressure. This study will provide a platform for African American patients with hypertension who are nonadherent to taking their prescribed medication to share their health beliefs related to mistrust, their specific beliefs about hypertension medication adherence, their attitudes, and how racial disparities impact them. It will also include a discussion regarding other barriers that may influence nonadherent behavior.

The goal of this study is to fill the gap in literature by focusing on how hypertension medication adherence may be influenced by health beliefs, which could explain why African American patients with hypertension who are nonadherent to taking their prescribed medication often fail to comply with instructions regarding their hypertension medication. It is the intent of the researcher to add to the body of knowledge

that will help to address a significant healthcare disparity between African Americans and other racial groups. Chapter 3 includes the research traditions and rationale for this study, the role of the researcher, the chosen methodology, the specific criteria for participants of the study, the instruments that will be used, specific procedures followed, and the data analysis plan. There is also a discussion regarding issues of trustworthiness and any ethical issues that may arise.

## Chapter 3: Methodology

The purpose of this qualitative phenomenological study was to explore the health beliefs of African American patients with hypertension who are nonadherent to taking their prescribed medication. The findings contribute to health care knowledge on medication nonadherence among African Americans with high blood pressure. This study can inform what medical providers should change related to health beliefs that influence nonadherence to medication among African American patients with hypertension who are nonadherent to taking their prescribed medication. This chapter offers an overview of the research design, including the methodology chosen, the role of the researcher, the target population, information regarding the selection criteria for participants, the data collection measures used, and the ethical considerations that arose throughout the course of the study.

### **Research Design & Rationale**

The study used a qualitative phenomenological study design to study the health beliefs of patients who are nonadherent to prescribed blood pressure medication among African American patients with hypertension who are nonadherent to taking their prescribed medication. Qualitative methods are appropriate when researchers want to understand the experiences and perceptions of study participants (Park & Park, 2016). Phenomenology is a qualitative approach that centers the lived experiences of people who share a specific experience or phenomenon (Leedy & Ormrod, 2010). Phenomenological researchers explain the meaning, structure, and essence of participants' lived experiences relating to a specific phenomenon (Moustakas, 1994; Van Manen, 1990). Lived



experiences are events or acts that are undergone by individuals from a personal, social, or environmental perspective (Creswell, 2017). A qualitative phenomenological design involves conducting interviews to obtain firsthand accounts of participants' experiences (Creswell, 2017). This study involved interviewing African Americans with prescriptions for high blood pressure medication to understand the health beliefs that may influence their nonadherence to taking prescribed medication recommendation, answering the following RQs:

RQ 1: What are the health beliefs of African Americans patients with hypertension who are nonadherent to taking their prescribed medication?

RQ 2:-How significant are the beliefs of African Americans with hypertension who are not adherent to taking their prescribed medication in maintaining control of their high blood pressure?

### **Research Tradition**

Qualitative research is an approach used to explore and understand people or groups who share experiences or problems (Creswell, 2017). Qualitative research can aid researchers in acquiring the thoughts and feelings of research participants, which then helps them develop an understanding of peoples' experiences (Sutton & Austin, 2015). This method of research involves data collection within a participant setting, which facilitates participant-informed findings. Consequently, qualitative researchers favor an inductive style of reasoning, which enables researchers to construct interpretations based on the data provided by participants (Creswell, 2017).

The principles of transcendental phenomenology informed this study.

Transcendental phenomenological research practices are based on seminal work by Clark Moustakas (1994). Moustakas advocated that the researcher disregard prejudgments by consciously acknowledging and then bracketing their biases, a practice known as epoché. According to Moustakas, epoché enables the researcher to understand the perspective of study participants more effectively.

This study involved using the methods of transcendental phenomenology to understand the health beliefs of African American patients with hypertension who are nonadherent to taking their prescribed medication. Observing their experiences required an explanatory approach. To apply these methods, I reflected and fully comprehended the core implications of nonadherence to hypertension medication as a phenomenon. Although there are other qualitative approaches, such as ethnography, grounded theory, narrative, and case study, conducting a phenomenological method was most apt to elicit health beliefs of African American patients with hypertension who are nonadherent to taking their prescribed medication. This approach helped bridge the gap in the literature regarding prescribed medication adherence and nonadherence in the African American population.

### **Role of the Researcher**

For this qualitative study, I was the primary data collection instrument.

Qualitative researchers are responsible for collecting, synthesizing, and interpreting data (Fusch & Ness, 2015). To be an effective data collection instrument, qualitative researchers must ask relevant questions, listen carefully, and adapt to the interview

situation. Moreover, having a thorough knowledge of the study topic also contributes to the researcher's effectiveness (Yin, 2018). As the researcher, I listened carefully and focused my understanding of the health care system and behavioral psychology, keeping in mind the constructs of the HBM to elicit in-depth responses from study participants. Interview questions were used to elicit information from participants regarding their health beliefs related to taking medication for high blood pressure to acquire a deep understanding of their experiences. I did not share any connections with the participants and was therefore able to minimize bias in collecting and interpreting the data.

### **Methodology**

The targeted population for this study was nonadherent African Americans who lived in the urban communities of southeastern Michigan. I planned to interview approximately 12–18 participants or until I reached data saturation. Data saturation occurs when there is no new information to be gleaned, and the researcher has obtained enough information for replication of the study (Fusch & Ness, 2015). The African American population was chosen because African Americans have been found to endure a disproportionately high incidence of hypertension, which often results in worse healthcare outcomes. Further, African American patients with hypertension who are nonadherent to taking their prescribed medication are less likely to control their blood pressure (Long et al, 2017). Influences associated with racial and regional heart disease, like those found in southeastern Michigan, include low socioeconomic status and education, lower physical activity and obesity, and a lack of access to healthcare resources.

Criteria or distinct characteristics that were used to identify whether participants were included in the study were determined by the following: (a) be able to speak English, (b) be African American, (c) have been diagnosed with high blood pressure, (d) have been prescribed high blood pressure medication by their doctor, and (e) nonadherent to prescribed medication recommendations. Criteria that excluded participants from participating in the study included (a) failure to align with the inclusion criteria, (b) participant adherence to prescribed medication (e.g., the participant has not modified or skipped doses, has taken their medication correctly, understands how to take their medication as prescribed, and takes their medicine as prescribed more than 60% of the time [WHO, 2003; Witry et al., 2017]), (c) had a diagnosis of incompetency by their physician, or (d) if the patient was pregnant. When participants were excluded from participating in this study, their exclusion was handled respectfully and without stigma by ensuring that participants remained confidential.

### **Recruitment of Participants**

To recruit participants for this study, I used purposeful snowball sampling. Snowball sampling is a type of purposeful sampling used to identify and select individuals with knowledge and experience regarding a phenomenon (Creswell & Clark, 2011). Although there are different methods of data collection, such as interviews, direct observations, and focus groups, the use of snowball sampling allows for researchers the ability to choose participants for a study that meet a particular criterion as part of a population that represents the whole (Naderifar et al., 2017). In this study, purposeful snowball sampling allowed me to obtain study participants that met a specific criterion,

who shared a common phenomenon, who were not selected from a general population but instead from a shared phenomenon, from a particular population. This sampling strategy was used until the sample size was achieved.

Participant recruitment occurred using electronic flyers sent out via social media sites, such as online media sites like Facebook and Instagram. Participants were also contacted by word of mouth. I provided consent forms to potential participants via email, which included the intentions of the study. No data collection began until I received notification of authorization from Walden University's Internal Review Board (IRB; approval no. 12-15-20-0409246).

After expressing interest in the study, participants joined in a phone interview to determine eligibility. Determining eligibility involved meeting all the inclusion criteria and none of the exclusion criteria. After determining eligibility, participants were contacted to discuss the study and asked to confirm their willingness to participate. Participants who expressed willingness signed informed consent forms to participate in the study by replying to an email with the words "I consent."

Once participants agreed to participate in the study, I scheduled phone or Zoom interviews with them. Data collection for this study involved interviews with open-ended questioning. Use of 12-18 participants within a qualitative study, allows the researcher to obtain theoretical grounding (Luborsky & Rubenstein, 2017). This aligns with a study regarding hypertension and provided a method for detailing the health beliefs of African American patients with hypertension who are nonadherent to taking their prescribed medication. Use of specific criterion allowed for revealing how the health beliefs of

African American patients with hypertension who are nonadherent to taking their prescribed medication influence prescription medication adherence and nonadherence. It was the objective of this study to illuminate methods to increase medication adherence among African American patients with hypertension who are nonadherent to taking their prescribed medication.

### **Data Saturation and Sample Size**

Participant recruitment occurred using electronic flyers sent out via social media sites, such as online media sites like Facebook and Instagram to reach a broad sample of potential candidates. Participants were also contacted by word of mouth. Data collection for this study involved conducting open-ended interviews with 12-18 African Americans participants diagnosed with hypertension who are nonadherent to taking prescribed medication. According to Yin (2018) 10 participants are enough to reach data saturation. Data saturation is a useful tool considered vital to a study because saturation determines whether research studies have ample and adequate data to draw valid conclusions.

### **Instrumentation and Data Collection**

Interviews and focus groups are the most common methods used in a qualitative research study (Gill, et al, 2008). In addition to, during interviews, researchers administer predetermined questions designed to elicit information regarding specific topics. There are three types of fundamental research interviews researchers can use to collect data: (a) structured, (b) semi-structured, and (c) unstructured interviews. Structured interviews often consist of verbally administered questionnaires, with little to no dissimilarity, and with no opportunity for follow-up questions to responses that permit further explanation

(Gill et al., 2008). By their very nature, structured interviews only allow for limited participant responses and would be of little use where depth is necessary.

In contrast, unstructured interviews do not reflect any biased theories or ideas and are presented with little or no structure (Gill et al., 2008). According to the researcher, unstructured interviews are often laborious and can be difficult to manage, and there is very little guidance to participants regarding the direction of their responses. Use of unstructured questions would only be sufficient where there is a substantial need for depth or in areas of research where there is almost no known data on a specific subject or where a dissimilar perspective of a recognized subject is needed.

Semi-structured interviews consist of an array of relevant questions that help explain areas of research to be explored but also allows room for researchers to deviate (Gill et al., 2008). The use of this approach allows the interviewer to pursue responses in greater detail to acquire relevant data. This interview structure, which is frequently utilized in healthcare research, provides research participants with guidance on what to discuss. Scholars suggest that the flexibility of this approach versus structured interviews allow for the discovery of explanation of data that is pertinent to the participants of a study but may consist of information that may not have been previously considered (Gill et al., 2008)

Therefore, to gather data, the instrumentation tools that were used were semi-structured interviews. I scheduled interviews that yielded ample data related to attitudes and beliefs associated with medication adherence. The focus of the semi-structured interviews was to obtain data that addressed the aims and objectives of this study. The

interview questions asked were chosen by me with good judgment, open-ended, natural, thoughtful, thought-out, and made informal enough for participants to understand. The questions were also structured so that they were easy to understand initially and followed by questions with a more arduous focus. I chose this method to ensure participants felt comfortable and to create an environment that was comfortable and designed to build a level of confidence and rapport. Such deliberate action helped to generate rich information that then subsequently developed the communication along.

### **Data Analysis**

The analysis of qualitative data must be consistent and thoughtful (Yin, 2018). To accurately interpret the data, I digitally recorded the interviews, did my own transcriptions from the interviews, and typed up and recorded all associated notes within 24 to 48 hours of finishing the individual interviews with participants. I paid particular attention to going over the transcripts at least three times, to ensure accuracy. I observed for common emergent themes throughout the interview processes and data analysis portions of the study. I used thematic analysis, according to Kvale and Brinkman's (2009) seven stages of interviewing recommended by the authors. These consist of (1) thermalizing— explaining what information is being sought, how, and for what purpose, (2) designing the study, (3) using interview questions to interview participants, (4) transcribing the interviews, (5) conducting data analysis, (6) verifying the data, and (7) reducing the findings clearly and concisely. The material gathered through interviewing participants was used to understand and explore the RQ.



### **Trustworthiness**

Concerning trustworthiness, methods were taken to enhance the validity of the findings. Along with remaining as objective as possible, I strengthened the findings by considering issues of credibility, dependability, transferability, and confirmability. Credibility is based on triangulation (Fusch & Ness, 2015). Primarily, the collection of multiple types of data helps ensure credibility. I achieved credibility through interviewing participants until data saturation was reached and by using triangulation to thoroughly analyze all the data obtained.

To ensure dependability, I used an audit trail by (a) describing the reasons for choosing the participants I did, (b) clarifying the purpose of the study to the participants, (c) illustrating the data collection process, (d) discussing the conversion of the data during the process, (e) sharing the precise techniques used to ensure credibility, and (f) clarifying the study's findings (Yin, 2018). I also used triangulation to enhance dependability. These are effective ways to track the collection of data and decision-making processes (Denzin & Lincoln, 2018). To achieve transferability, I used thick descriptions based on what was been shared by the participants and by using a sample of participants that was applicable to other areas and studies. Using these methods helped to ensure that the findings are transferable, to other circumstances and regions. Finally, for confirmability, member checking helped confirm that the participants shared what they intended to share.

## **Ethical Procedures**

Following the appropriate ethical procedures will guarantee stable results and the safety and confidentiality of the participants (Denzin, 2017). In conducting the study, I ensured that I gained IRB approval before continuing the data collection process. I also obtained informed consent from the participants by having them agree to an informed consent form, and by remaining aware of the possibility of breaking any participant confidences. To help ensure confidentiality, I presented the purpose of the study and the role of the participants by going over the informed consent form with participants before they signed the form and I provided participants with adequate time to review the study information before they were requested to provide consent. I made sure that the participants knew of any risks or benefits, their rights as participants, as well as ensuring participants that their consent would be documented. Providing participants with inclusion and exclusion criteria ensured that the participants comprehended their reasons for why they were being asked to participate in the study. Additionally, the purpose of study, an understandable description of the data collection procedures, and an estimated time of requested or anticipated participant commitment for participation was included. The participants were made aware that they would be digitally recorded (with their permission), that the study was completely voluntary, and that they could leave the study at any time without consequence or penalty. All informed consent from participants was appropriately documented. I also informed the participants that what they shared would remain in a data encrypted file on my computer and in a locked file cabinet and that after 5 years all material relating to the study would be either deleted or shredded.

Certain ethical issues arose in this study. First, I was the sole investigator conducting the study; therefore, from first collecting data to analyzing the results, there was an opportunity for researcher bias to emerge. However, I strove to remain open minded and impartial. Having no relationship with the participants served to maintain objectivity. Some of the potential for researcher bias was lessened by member checking and through using NVivo in coding and data analysis (Birt et al., 2016).

Another ethical issue related to participants honestly answering the interview questions. Again, member checking and transcription review of the interviews assisted in providing objective data. In addition, having 12 to 18 participants was sufficient to gather consistent themes (Yin, 2018). Any information that seemed fully in opposition to what the majority of the participants were stating was reassessed and further discussed with that participant. All participants had an opportunity to amend or add to their responses.

### **Summary and Transition**

The purpose of this qualitative phenomenological study was to explore and gain an understanding of the health beliefs of African American patients with hypertension who are nonadherent to taking their prescribed medication. The target population for this study was African American patients with hypertension who are nonadherent to taking their prescribed medication and living in the urban communities of the southeastern area of Michigan. After I obtained approval for the study from Walden University's IRB, I emailed participants and explained the purpose for the study. I took special care to ensure their confidentiality. I arranged to interview the participants, and digitally recorded their answers with their permission. With the use of interviews and NVivo11 software, I

conducted data analysis and coding, and interpreted the data to align with the RQs used in the study. In Chapter 4, I discuss the findings, share the relevancy of the study to the professional practice, indicate implications for change, make recommendations for action, and share suggestions for further research. I also shared the study results with participants directly by providing them with a written summary of the results.

## Chapter 4: Results

The intent of this qualitative phenomenological study was to explore the health beliefs of African American patients diagnosed with hypertension who are nonadherent to taking their prescribed medication, addressing RQs related to the health beliefs of African Americans with hypertension and the significance of these health beliefs. The results of this study emerged from qualitative interviews and the identification of the themes that represent the experiences of African Americans with hypertension who do not adhere to taking their prescribed medication. Themes related to participants' experiences and personal beliefs about having been diagnosed with high blood pressure, their medication-taking behavior routines, their relationships with their doctors, their relationships with their family, their perspective on taking medication related to having a quality of life, the barriers and obstacles that they may have encountered, having access to their doctors, their trust in the health care system, what it means to be medically adherent, and their explanations regarding their level of medical adherence. Chapter 4 includes the demographics, data collection, analysis, evidence of trustworthiness, and results. Additionally, I provide details regarding how the data was collected, documented, and analyzed to obtain results.

### **Setting**

The setting for this study was private and involved the use of phone calls to interview participants. This study included 12 recorded phone calls in which I conducted open-ended, semistructured interviews. Each participant was made aware that the interviews were being recorded and that only pertinent information collected for thematic

analysis would be used for the study. Each participant also received a copy of the study's consent form by email. Once participants received the consent form, I worked with them to schedule interviews based on the comfortability and availability of the participants. To my knowledge there were no personal or organizational conditions that may have influenced participants or the experiences they shared while participating in the interviews.

### **Demographics**

Purposive snowball sampling was used to recruit 12 African American patients diagnosed with hypertension who were nonadherent to taking their prescribed medication. The participants of this study were African American men and women with varying ages from 45 and older. Participant demographics are displayed in Table 1. All 12 participants self-identified as having been prescribed high blood pressure medication for at least 1 year or more. All participants lived in Michigan and participants were advised that they were being invited to share their medication taking behavior experiences.

**Table 1**

*Participant Demographics*

Demographic information	Data
Male(s)	1
Female(s)	11
Reside in the Michigan 5+ years	12
Some college	10
Identified as being African American	12
English primary language	12

Once participants made contact via email with their name and email for participation, each were sent a copy of the informed consent via email to obtain their electronic signature. The consent form included the purpose of the study, the procedures of the study, and reasons for participation in the study. Participants were advised that the study was specific and entirely voluntary. They were also assured that whether they chose to participate in the study or not, all communication would remain confidential and on a locked computer. Participants were advised that they would not be forced, pressed, nor penalized and if they chose not to participate, their refusal would not be discussed with anyone. Risks and benefits of being in the study were also identified, specifics regarding how I would maintain the privacy of information they shared, and contact information for Walden University's IRB as well as my approval number for the study were also included in case the participant wished to verify the authenticity of the study. Once participants sent back their consent via email, scheduled appointment times were discussed for their interview. An average of 35–45-minute semistructured interviews were then held by phone. All interviews were recorded.

Initially, the target number of participants was 12–18 participants; however, data saturation was reached after interviewing 12 participants. Data saturation is reached when no new information would be gained from interviewing additional participants (Fusch & Ness, 2015). Therefore, once I had obtained enough information useful to complete a comprehensible analysis, I stopped interviewing participants. Criteria for participants to be considered for this study included that they (a) must be able to speak English, (b) be

African American, (c) had been diagnosed with high blood pressure, and (d) had been prescribed high blood pressure medication by their doctor.

### **Data Collection**

The interviews were conducted from December 2020 through January 2021. Semistructured interviews that lasted between 30–60 minutes were held by phone with 12 African American patients diagnosed with hypertension. Each of the 12 participants self-identified themselves as being physically diagnosed with hypertension by their doctors and having been given high blood pressure medication for 1 year or more.

Additional data collection tools that were used to collect data were an interview protocol (see Appendix), which included the interview questions and layout of the interview itself. The interview protocol was comprised of open-ended questions (see Appendix). The interview questions targeted participant experiences surrounding their ability to maintain comfortable relationships with their doctors, obstacles that they may have encountered while managing their blood pressure, their doctors' level of engagement in their health management, their level of access to resources regarding blood pressure management, their medication-taking behavior routines, the severity of their diagnosis, their understanding of the consequences of nonadherence and benefits of adherence, and how important they felt that managing their health was for living a quality life.

Use of semistructured interviews not only allowed me to explore areas of research that have not been explored but also allowed for me to depart from the structure of the interview and obtain other related data. Use of semistructured interviews also allowed me



to pursue participant responses in more detail (see Gill et al., 2008). The interviews were scheduled at the convenience of each participant, and the semistructured nature of the interview allowed for flexibility. If the participant did not understand what was being asked, then the flexibility of the interview allowed for discussion in addition to letting participants respond thoughtfully without fear of judgment. The environment was safe and designed to build a rapport between myself and the participants.

### **Data Analysis**

The process used for data analysis included one that moved inductively from coded units to larger themes. The 12 voice recordings were transcribed electronically and then highlighted and hand coded using codes based on the verbatim descriptions recorded during the interviews. I intended to use NVivo to transcribe and code the results of my study; however, because of the costs associated with using NVivo, I refrained.

For this study I used the HBM framework as the operational map to pinpoint the relevant attitudes and beliefs that I discovered while conducting data collection. Qualitative scholars often favor an inductive style of reasoning, which enables them to construct interpretations based on the data provided by participants (Creswell, 2017), which is why I chose to code each transcript using an inductive approach. The steps that I used to code the data were the following:

1. I uploaded my recorded semistructured interviews to Microsoft Office Live for transcription.
2. I handed coded each transcription by hand, creating codes and themes.
3. I merged common codes into themes for analysis.

4. I relistened to transcripts that may have translated incorrectly, verifying my transcription.

Prominent words or phrases that emerged from the transcription coding process were *risks, denial, consequence, positive reinforcement, acknowledgment, awareness, benefit, advantageous act, trust, compromise, obstacle, consistency, diet, discomfort, inconvenience, time management, opposition, aversion, circumvent, physiological complication, self-control, manipulate (manage or utilize skillfully), influence, self-efficacy, ability to act, aptitude, propensity, physiological benefits, and physiological reactions*. Based on repetition, six themes were derived from the words or phrases found via the transcriptions: (a) trust, (b) self-efficacy, (c) relationship, (d) autonomy, (e) severity, and (f) physiological reactions.

### **Evidence of Trustworthiness**

#### **Credibility**

Credibility in this study occurred using triangulation and saturation. I displayed the study's findings by writing up a summary of the comparison and analysis of the themes. I conducted triangulation by organizing the data and then incorporating and collaborating the intentions of the RQs with codes and themes from the study. I used the formula provided from the qualitative theoretical framework, which served as an output of relevant data.

#### **Transferability**

Transferability in this study occurred through transparency regarding why participants were chosen for this study. Transferability was also executed through

transcription and coding of the interviews. I began the thematic analysis by reading the transcripts line by line, highlighting and coding each stanza, then translating them into single ideas. Once I coded each transcript, I referred to the constructs of my theoretical framework and literature review themes related to the HBM.

Participants in this study were selected by purposeful sampling. Participants were informed of the purpose of the study within the electronic consent form they received individually. The initial flyer informed potential participants that they would be participating in a new study and that their experiences could help healthcare providers like doctors and counselors better understand and help patients. The consent form informed the participant that the study would determine why African Americans do not correctly take their high blood pressure medication. The consent form and flyer also explained that the participant would need to commit to an audio-recorded phone interview that would last from 30–60 minutes. Additionally, I shared the data conversion process with the participants as a component of the interview protocol. Each participant was verbally informed that “once all the interviews have been concluded and transcribed, I will use the data to find common themes.” Use of this method allowed for the findings to be transferrable to other circumstances and regions because of the flexibility of the theoretical framework’s basis, intention, purpose, and structure.

### **Dependability**

I executed dependability by creating an audit trail. I recorded each semistructured interview, transcribed each audio copy using electronic software, and coded each transcript by hand. Additionally, I explained why I chose the participants for this study

and clarified the purpose of the study throughout the research process and to the participants of the study. Furthermore, I illustrated the data.

### **Confirmability**

Member checking was employed as a technique for surveying and triangulating the credibility of the transcribed data, which I matriculated into securing verification of our exchange of information, helped to confirm that the participants shared what they intended to share (see Birt et al., 2016). Throughout the course of the interviews, I would often repeat back to the participants my understanding of what they shared to ensure that what was being recorded and my understanding aligned with the intentions of the participant. Instances that required more clarification ensured that not only did the recorded audio verify credibility of the data but also included fact checking with participants as well (Birt et al., 2016).

### **Results**

The purpose of this qualitative phenomenological study was to explore and gain an understanding of the health beliefs of African American patients diagnosed with hypertension who are nonadherent to taking their prescribed medication. The phenomenon explored for this study was to address two RQs:

RQ 1: What are the health beliefs of African Americans patients with hypertension who are nonadherent to taking their prescribed medication?

RQ 2: How significant are the beliefs of African Americans with hypertension who are not adherent to taking their prescribed medication in maintaining control of their high blood pressure?

Previous research has identified the link between medication nonadherence and morbidity, but there is a lack of understanding why patients do not follow medical instructions (Alsaman & Smith, 2013; Long et al., 2017). Therefore, I conducted 12 semistructured interviews to learn about beliefs that influence prescribed medication adherence among African Americans by examining the health beliefs of African Americans who share common nonadherence medication behaviors.

While keeping in mind the RQs of this study and spending time with the collected data, seven themes emerged from the interviews: (a) trust, (b) self-efficacy, (c) denial, (d) relationships, (e) autonomy, (f) severity, and (g) physiological reactions in decision making (see Table 1). Each theme aligned with one of the RQs developed for the study. Therefore, each RQ was used to merge data to disseminate for analysis. Following are the results from the participants' interviews and tables to iterate the findings.

**Table 2**

*Research Questions and Corresponding Themes*

Research questions	Themes	Number of occurrences
1. What are the health beliefs of African Americans patients with hypertension who are non-adherent to taking their prescribed medication?	Trust	35
	Self-efficacy	28
	Denial	11
	Relationship	11
2. How significant are the beliefs of African Americans with hypertension who are not adherent to taking their prescribed medication in maintaining control of their high blood pressure?	Autonomy	11
	Severity	10
	Physiological reactions	10

**Theme 1: Trust**

Individually participants shared a variety experiences related their health beliefs and experiences since being diagnosed with high blood pressure. Although there were

only 12 participants, there were 35 occasions during which participants mentioned trust and distrust experiences (see Table 3). For example, Participant 10 (P10) stated that had they taken a particular medication, trusting that their doctor's advice was accurate. They then shared that they learned it [the medication] can kill you. Participants also shared their experiences with trust and miscommunication. For example, P10 shared,

You explain to him [the doctor] what is going on with you and then he wants to talk to you for a couple of seconds and then he's running out the door and sending the nurse back in. I have a problem with that with the doctor.

Based on participants' responses, there is a connection between medication nonadherence and underdeveloped relationships that have a lack of trust, indicating the importance of trust and medication adherence as well as trust and failed relationships with their doctors and trust and miscommunication.

Additionally, participants shared that they want to trust that their doctors and nurses will act in their best interest. For example, P2 stated it's very important that I stay involved with my doctor. P6 stated that, I believe they have more medical knowledge than me. Participants shared that they follow through when they trust their doctor: "My doctor asked me to take the prescribed medicine (P8). P11 similarly shared, it's very important he understands how my feelings are too about medication. Several participants shared responses related to trust concerns and ultimately indicated that trusting their doctors is related to their medication taking behaviors. Therefore, trust was considered important in decision making regarding medication adherence.

**Table 3***Participant Response Examples: Trust*

Theme	Description of theme	Participant	Participant response
Trust (35)	Beliefs that their doctors have their best interest at heart.	P8	I trust my doctor. He [doctor] advised me to take it as prescribed.
		P2	It's very important to stay involved with my doctor
		P2	I do value his opinion-I do value his opinion
		P5	Which was what my cardiologist told me to do
		P6	I believe they had more medical knowledge than me.

**Theme 2: Self-Efficacy**

During the interview, several participants expressed their views and experiences relating their behaviors to self-efficacy, meaning they believed in their own capabilities (see Table 4). Many participants believed that they knew what to do, how to manage their health, and what course of actions to take to do what they needed. P4 indicated, I've been aware of how my pressure rising with my body. P4 continued by explaining,

I would take the meds if I'm getting highly aggravated, annoyed something to check, did some things out of my control, something at work where I feel that now I'm catching a headache I've eaten. But now I'm catching a headache. I would take my pressure and my hands may start to swell.

In the case of P4, as well as other instances, participants felt that they were proficient in their abilities and therefore justified their ability to act. Such as in the case of P10 who stated, I changed my lifestyle and diet, and I was able to get off of the blood pressure medicine. P11 said, I eat right and exercise. Several participants expressed that

they are specifically aware of the things that affect their diet. For example, P12 found that diet affected their blood pressure: Sometimes different pork affects me in different ways.



**Table 4***Participant Response Examples: Self-Efficacy*

Theme	Description of theme	Participant	Participant response
Self-efficacy	Having the beliefs that cause them to act own their own and take care of their needs, themselves.	P7	Then I called my doctor and said, well, I'm thinking this blood pressure medication may not be high enough dosage or.
		P12	I didn't really feel any different. I was just careful as to what I would do like rising up really quick from a seated position or eating stuff that I know that will. -
		P11	I changed my lifestyle and diet, and I was able to get off of the blood pressure medicine.
		P11	I eat right and exercise.
		P12	Sometimes different pork affects me in different ways.
		P5	When I was going through my breast cancer there was some meds that I just didn't take because I wasn't comfortable.
		P4	I've been aware of how my pressure rising with my body. So, for example, I would take the meds, for example, if I'm getting highly aggravated, annoyed something to check, did some things out of my control, something at work where I feel that now I'm catching a headache I've eaten. But now I'm catching a headache. Um, I would take my pressure and my hands may start to swell.
		P5	I've been monitoring. I take my blood pressure twice a day and I record, and I have a high heart rate, so they were trying to control the heart rate as well, which means increasing the blood pressure MEDS.

**Theme 3: Denial**

During the interview many participants denied the idea of having the illness itself or the vulnerability of ever acquiring a chronic illness (see Table 5). P7 stated, I really didn't need to take it. P7 also felt that there were no symptoms and shared, I didn't need the medication. Additionally, P7 stated that hypertension was potentially prescribed to African Americans as a cultural stigma putting African Americans on high blood pressure medicine is a business. In alignment with this, P8 stated I felt in our community doctors in general sometimes, but just more specifically, in African American community, just want to hand you a pill. P4 felt that they could not possibly have the illness even upon onset and confirmation from their doctors and stated [I am] too young to be on medication. Subsequently, P4 would only adhere when there were scheduled to visit with their doctor and I try to trick the doctors, whenever I have a doctor's appointment! Furthermore, P4 revealed that, I'll take the meds that morning because I've had history of having my pressure rise while I'm at the doctor's office. P7 denied the severity of having the high blood pressure I don't feel that it was that severe.

**Table 5***Participant Response Examples: Denial*

Theme	Description of Theme	Participant	Participant Responses
The presence of denial	Beliefs that chronic illness may be untrue, that illness was not as severe as health professionals were leading them to believe.	P3	I initially wasn't in agreement with taking.
		P4	Too young to be on medication
		P7	I really didn't need to take it, - DENIAL
			I try to trick the doctors.
		P4	Whenever I have a doctor's appointment, I'll take the meds that morning because I've had history of having my pressure rise while I'm at the doctor's office – DENIAL
		P7	I really didn't need to take it DENIAL
		P7	Putting African Americans on HBP medicine is a business.
	P8	I felt in our community doctors in general sometimes, but just more specifically, in African American community, just want to hand you a pill	
	P7	I don't feel that it was that severe	

*Note.* HBP = high blood pressure

**Theme 4: Doctor–Patient Relationship**

During the interviews, participants expressed their perspectives as they related to having wanted or having a shared relationship with their doctor. Few participants described the importance of having a relationship with their doctors with relation to the outcome of their health (see Table 6). In many cases, participants shared that they felt that it was very important that they have comfortable relationships with their doctors. P1 stated, relationship with doctor is it's extremely important and because she's [the doctor]

my connection between good health and poor. When asked about the role of having their doctor help in maintaining good health, P8 expressed that it is very important to have a shared relationship with their doctor. Few expressed that they either had a comfortable relationship with their doctors, such as P1 who stated,

I have an African American female doctor and she and I have a long relationship physician patient, she [the doctor] hears me, understands when I tell her something that I know what I'm talking about. So that's been pretty good as far as the medications I've gradually had to add a different additional medication.

In alignment with P1, P5 stated that,

being involved, it makes me feel that he is concerned and that he knows my situation and that's kind of doctor that I you know I like it. I know they have many patients but being a previous educator, I had many students and I had to get to know that soon an individual level, something about this student to let me know to let them know that I was concerned, in order to build a relationship.

One participant in particular felt that their doctor understood them as a result of their relationship with them. P11 confirmed that it's very important he understands how my feelings are too about medication. P7 felt that they could either get in contact with their doctor, talk to their doctor in their presence, or call for assistance if they needed help. While P7 stated, I will call the doctor's office, then I'm are normally connected with a nurse.

**Table 6***Participant Response Examples: Positive Relationship*

Theme	Description of theme	Participant	Participant Responses
Positive Relationship	Having comfort in building trust with their doctor, other healthcare professionals, feeling that they are priority	P1	I have an African American female doctor and she and I have a long relationship physician patient, she (the doctor) hears me understands when I tell her something that I know what I'm talking about. So that's been pretty good as far as the medications I've gradually had to add a different additional medication-
		P5	it helps build relationships.
		P5	Being involved, it makes me feel that he is concerned and that he knows my situation and that's kind of doctor that I you know I like it. I know they have many patients but being a previous educator, I had many students and I had to get to know that soon an individual level, something about this student to let me know to let them know that I was concerned. And in order to build a relationship.
		P1	Relationship with doctor is it's extremely important. OK, because she's my connection between good health and poor
		P8	Very important.
		P11	it's very important he understands how my feelings are too about medication
		P7	I will call the doctor's office, then I'm normally connected with a nurse.

**Theme 5: Autonomy**

A review of participant responses showed more than 28 occurrences of participants sharing that they felt empowered to make decisions (see Table 7). The participants indicated they would either jump to behave, had plans for how to execute their need, or knew how to address their blood pressure levels. For example, P7 stated Then I called my doctor and said, well, I'm thinking this blood pressure medication may not be high enough dosage. Based on the responses, participants indicated they made phone calls to reach their doctors, set up environments to handle their medication-taking regimes, or reached out for assistance.

On several occasions participants iterated their autonomy in that they often made decisions that were in their own best interest. For example, P5 shared, I think it's very important for us as African Americans specially to take control of our health and to know our bodies and sometimes you just can't go by what the doctors tell you to take. It may not be right for you. Another example of a participant exercising their right of autonomy is P7 who chose to self-govern as a right of independence and making the best decision, suitable for their best interest. According to P7, I'll take it most of the time, but sometimes I do take just skip that day and take and just continue the next one and taking understand and I stopped taking it. One participant chose to depend on their own inner being. P11 stated that lifestyle change, diet change, and a lot of prayer was their method of choice; emphasizing that a very strict diet, but I can truly say it does help. P4 felt that age played a factor in their health and right to choose based on stating that they could choose what in their best interest. P4 stated, I just feel I'm too young to be on medication.

**Table 7***Participant Response Examples – Autonomy*

Theme	Description of theme	Participant	Participant responses
Autonomy in decision making	Ability to decide what is in the best interest of themselves for themselves. Participants chose to self-govern as a right of independence over making the best decision, suitable for their best interest.	P4	I guess I'm guess that they know more about your body than you do- that you don't get on medication until you hit a certain age and to be diagnosed at 28. I didn't hit that age apparently, and that was just my own mental deterrent. Oh, I don't need to be honest, and it caused me to take it irregularly. I stopped taking it
		P11	Lifestyle change diet change much prayer.
		P5	I think it's very important for us as African Americans specially to take control of our health and to know our bodies and sometimes you just can't go by what the doctors.
		P5	Tells you to take. It may not be right for you. OK, and your situation. I know breast cancer survivor, so I get that same situation.
		P11	It's a very strict diet, but I can truly say it does help.
		P7	I'll take it most of the time, but sometimes I do take just skip that day and take and just continue the next one and taking understand and I stopped taking it.”

**Theme 6: Severity of Illness**

Responses related to this theme from participants dealt with their beliefs of how high blood pressure medication nonadherence subsequently might attribute to greater risks of stroke, heart attack, blood clots, aneurysms, vision concerns, dizziness, and

death. Here participants shared their knowledge of the consequences of how severe high blood pressure could or might affect them (see Table 8). For example, P6 acknowledged that, high blood pressure can result in death. Several other participants iterated that they were very conscientious of what could happen should they not comply with following their doctor's advice. Such as P4 who stated, I need to stop trying to talk about myself. I need to stop playing and follow the rules. I know death has no age.

**Table 8**

*Participant Response Examples: Severity*

Theme	Description of theme	Participant	Participant responses
Severity	Patients understood the ramifications of non-adherence to prescribed high blood pressure medication	P6	It can result in death, - SEVERITY OF ILLNESS
		P6	One participant stated that “you cannot heal yourself”,
		P9	I’m not trying to stroke out -
		P6	I wasn’t taking my medicine, and then I end up having an aneurysm, -
		P4	I need to stop trying to talk about myself. I need to stop playing and follow the rules. know death has no age.
		P6	It can result in death, -

**Theme 7: Physiological Reactions**

In at least five instances, participants mentioned physiological reactions, meaning there were adverse effects that emerged in which the participants experienced severe reactions to taking their blood pressure medication (see Table 9). These physiological reactions were then classified as obstacles that participants were faced with. For example, P10 indicated that they had difficulty breathing and began wheezing. P10 contacted their physician and the doctor determined that the blood pressure medication was causing the



physiological reaction. In response to this situation, P10 stated, “Before changing my medication, come to find out that it was a side effect from the Lisinopril that had almost caused me to die basically. Participants chose how they were to be taking their medication. For example, P3 stated that, my hair started to fall out me oh he had to change it. And that, it lowered my potassium.

**Table 9**

*Participant Response Examples: Physiological Reactions*

Theme	Description of theme	Participant	Participant responses
Physiological reactions	Participants experienced reactions from medications. Participants either manipulated the method that they were taking their medication, began to skip or miss doses, or halted taking their prescribed medication all together.	P3	My hair started to fall out me oh he had to change it.
		P3	lowered my potassium-
		P8	I have a very low resting heart rate, so I can't take anything that's going to lower my heart rate any more than what it already is -
		P10 P10	Difficult breathing, wheezing. - Before changing my medication, come to find out that it was a side effect from the lisinopril that had almost caused me to die basically.

Applying the HBM constructs to the study and aligning the findings from what the participants shared, allowed me to gain a better understanding of the many health-related beliefs and experiences that take place in the lives of my participants. It helped to better explain how influence related to health-related actions cause influence human behavior as well as explore additional key characteristics (Champion & Skinner, 2008). These concepts provide a platform for a human's willingness and readiness to behave in a certain way in relation to health issues (Hochbaum et al., 1952).

## Summary

The transcribed data from this study provided details identifying that there are a large portion of beliefs that surround experiences as they relate to adhering to taking prescribed medication. Based on the variety of experiences, reasons for nonadherent behaviors may occur in multiple ways. Based on explanations from the 12 participants, most of the participants are aware and acknowledges that should they act to positively respond to taking part in more controlled adhered efforts and that there is power in compliance.

### **Relationships to Research Questions**

As this relates to the first RQ which sought to identify the beliefs of African Americans with hypertension who non-adherent is to take their prescribed medication. The participants of this study were aware that there are consequences associated with nonadherence to blood pressure medication. Participants were able to self-identify their obstacles and barriers that influence whether they are compliant. Participants were ready to act but only in the interest of making the best choices for themselves. As this relates to the second RQ that addresses How significant are the beliefs of African Americans medication in maintaining control of their high blood pressure , participants confirmed that they desire to control their high blood pressure but because of the many challenges that present themselves, such as trust, fear, denial, autonomy as a barrier of apprehension, obliviousness, and physiological reactions caused from them adhering to taking their prescribed medication, positive adherence is a work in progress.

It is my intention to share with each participants a summary of the results of this study, which will help participants to gain insight into the frequency of this phenomenon. The pattern of data collected from this study provides adequate details surrounding the health beliefs of African Americans who may also suffer from not adhering.

In Chapter 5, I will reiterate the purpose of the study, provide a summary of the findings, identify what the findings confirmed in the literature, address those things the findings disconfirmed, address how the findings extended the knowledge in the literature related to nonadherence to medication, and interpret the findings with regard to the HBM as a framework. Additionally, I address the limitations of the study, recommendations for future research, and the implications of this study.

## Chapter 5: Discussion, Conclusions, and Recommendations

This study was conducted to gain an understanding of the health beliefs of African American patients diagnosed with hypertension who are nonadherent to taking their prescribed medication, illuminating how the health beliefs of these individuals influences their prescribed medication taking behavior. Seven themes emerged from the interviews with 12 participants: (a) trust, (b) self-efficacy, (c) denial, (d) relationship, (e) autonomy, (f) severity, and (g) physiological reactions. Chapter 5 includes an interpretation of the findings, limitations of the study, recommendations for future research, and implications for positive social change.

### **Interpretation of Findings**

The aim of this study was to provide a platform for African American patients with hypertension who are nonadherent to taking their prescribed medication to share their health beliefs, which can increase knowledge of health beliefs among both health care professionals and researchers. An inductive style of reasoning approach enabled me to interpret the data and based on the findings of the participants accounts of their lived experiences (see Creswell, 2017). The HBM was also used as a guide for interpretation. The HBM allowed me to hypothesize if in fact people are less likely to comply or not adhere with recommended actions that will reduce their health care risks based on whether the person (a) regards themselves as susceptible to an illness, (b) believes that their condition could have potentially severe consequences, (c) deems that a sequence of actions is obtainable, (d) believes that the actions would be beneficial in reducing either their susceptibility to or severity of the condition, and (e) trusts that the anticipated

benefits of taking action overshadow the barriers. The six constructs of the HBM related to the themes from the findings (see Table 10).

**Table 10**

*Health Belief Model Construct and Emerged Themes*

HBM construct	Description of construct	Theme
Perceived Susceptibility	having beliefs concerning the chances of experiencing a risk or getting an illness or ailment. (Champion & Skinner, 2008).	Risks, denial
Perceived Benefit	beliefs in the ability and power of the recommended action to reduce probability of seriousness of impact.	Trust, relationship
Perceived Severity	having beliefs about how severe a risk or condition is and consequences are to follow	Severity
Perceived Barriers	having beliefs about the substantial and psychological costs of the recommended action.	Denial, physiologic al reactions
Cues to Action	approaches to trigger readiness	Autonomy, physiologic al Reactions
Self-efficacy	having beliefs that stimulate confidence in the ability to act.	Self-efficacy

**Trust**

The constructs of the HBM categorize trust as a perceived benefit (Champion & Skinner, 2008). Hence, people are likely to comply with recommended actions that will reduce their health care risks if the anticipated benefits of taking action overshadow the barriers. In essence, patients must feel that trusting their doctor's instructions and order (e.g., medication-taking advice) will benefit them rather than harm them (Alsalman & Smith, 2013). Thus, a reduction in distrust of medical personnel is likely to lead to increased medication adherence on the part of the patient (Alpers, 2017).

A lack of trust is a contributor to high uncontrolled high blood pressure rates as trust plays a significant role in adherence (Petthey et al., 2016). Patients who have had uncomfortable experiences with health care professionals are likely to be apprehensive of others in the medical field (Devine et al., 2018). Subsequently, patients over time have distrusted health care professionals because of adverse treatments of Blacks by the American health care system for reasons such as cultural mismatch, ethical violations, medical malpractice, fraud, security breaches, and abuses within the healthcare system (Armstrong et al., 2007). Therefore, in many circumstances, patients may be vulnerable, and they rely solely on concrete trustworthy sound decisions from their doctors.

The results of this study align with the HBM, which suggests that when patients have a relationship with health care provider and trust that what the doctor is recommending will benefit their health, then they are more inclined to become more medically adherent. P5 stated that they make decisions based on what they are told and that they took the necessary steps because it “was what my cardiologist told me to do.” This participant understood the importance of having a line of communication and that it helps them to follow through where they may stray while attempting to handle their health concerns. Therefore, this participant is more likely to comply with medical instruction when they trust their doctors.

Further, there were 35 different occasions during the interviews when participants voiced their opinions related to trust. For example, P6 specifically stated that they believed that their doctor had more medical knowledge than them. Similarly, P8 stated, I trust my doctor. P5 stated that when their doctor advised them to take the prescribed

medication, I was experienced, and very high blood pressure went to my cardiologist, and he increased all my dosages. Given the trust P5 had for their doctor, they decided to follow and adhere to the prescribed recommendations of their doctor. This study confirmed that trust is a perceived benefit, and that people are more likely to comply with recommended actions that will reduce their health care risks if the anticipated benefits of taking action overshadow the barriers (see Champion & Skinner, 2008).

### **Self-Efficacy**

The constructs of the HBM categorize self-efficacy as beliefs that stimulate confidence in the ability to act (Champion & Skinner, 2008). The HBM suggests that self-efficacy correlates with people who feel that they are confident to make decisions for themselves (Hochbaum, 1958). For example, P5 stated, when I was going through my breast cancer there was some meds that I just didn't take because I wasn't comfortable. Patients are more inclined to act if they feel that they know that they can protect themselves; therefore, understanding the benefits of adherence are more likely to increase a patient's medication adherence. With comparison to high blood pressure and medication adherence, participants would need to feel that they are confident, that they can manage, and that their abilities alone would help them maintain their health behaviors. One participant stated, I changed my lifestyle and diet, and I was able to get off of the blood pressure medicines. In this case the participant felt inclined to want to take control of their health because they deemed themselves as capable of doing so. The results of this study confirm that self-efficacy stimulates patients' abilities to act if they (the patient) deem themselves competent to do so.

**Denial**

The constructs of the HBM categorize denial as a perceived barrier (Champion & Skinner, 2008). As it relates to this study, denial is having beliefs that a diagnosis of having a chronic illness may be untrue and that the illness was not as severe as health professionals indicate them to believe, which may create a barrier to good health. For example, patients who exhibited no symptoms of high blood pressure did not adhere to medical instruction (Petty et al., 2016). P7 similarly stated, I really didn't need to take it. As this relates to the HBM, if participants do not regard themselves as susceptible to morbidity from nonadherence to medication, they may be less likely to adhere to prescription medication recommendations. This study confirmed denial as a barrier to medication adherence. Where there are barriers, participants are less likely to act. In essence, patients must believe that benefits of adhering to medication regimens outweigh obstacles they may encounter.

**Doctor–Patient Relationship**

The constructs of the HBM categorize relationships as a perceived benefit (Champion & Skinner, 2008). For this study, perceived beliefs related to the ability and power of the recommended action to reduce the probability of a serious impact (see Champion & Skinner, 2008). When participants were asked, how important do you think that a relationship with your doctors is to maintain an adherent medication regimen? Their responses aligned. For example, P6 expressed their experiences with their doctors and how comfortable and the import having a relationship creates accountability for both them and the doctor to have a shared understanding. Similarly, P1 expressed that,



relationships with doctors are extremely important. Participants felt that since their doctors were more knowledgeable than them, they relied on the relationships that they had developed with their doctors. P7 stated that their 10-year relationship allowed their doctor to keep up with them as a patient, and P8 indicated they maintained their prescribed health regimens.

Previous research has indicated that doctors must consider individual patient beliefs when trying to increase medication adherence (Hincapie et al., 2019). Patients want to have relationships with their doctors and many feel that having such relationships are important because of the implications of maintaining their health. This aligns with the HBM that patients may be more persuaded to adhere to taking their blood pressure medication as a result of having a positive relationship with their doctors. Additionally, this will work adversely in situations where they health practitioners fail to consider patients perspectives. If a patient deems that they have a relationship with their doctor, they may be more likely to adhere to medical instruction. The results of this study confirmed that positive doctor–patient relationships are essential in maintaining beneficial health care outcomes.

### **Autonomy and Autonomy as a Barrier**

The constructs of the HBM categorize autonomy as a cue to action (Champion & Skinner, 2008). In at least 11 circumstances, participants indicated they were triggered to react and therefore acted in the best interest of themselves. One participant felt that what they needed instead of what their doctor wanted was to change their lifestyle and pray. In many cases, the autonomy of self-became the best choice for the participants and others

who felt their needs were their deliberate choice. For example, P11 stated, I feel not taking it on a regular basis. It's good for me. Here the participant felt that they need to act in their own best interest. In some instances, autonomy meant that participants would act according to their doctor's advice in retrospect, or autonomy became an obstacle between adhering to medical compliance and refraining altogether. Thus, medication adherence may be the deliberate choice of the patient and may cause patients to be nonadherent (WHO, 2017). As a result, autonomy may explain those patients who never begin a newly prescribed prescription medication, modify doses, skip doses, change their medication-taking regimens, incorrectly use drugs prescribed to them, or absenteeism of medicine altogether (Witry, 2017).

### **Severity**

The constructs of the HBM categorize severity as having beliefs about how severe a risk or condition is and the consequences that are to follow (Champion & Skinner, 2008). Several participants shared beliefs that they understood the severity of having high blood pressure and consequences related to nonadherence to taking high blood pressure medication. In instances where participants did not believe that nonadherence to medication might lead them to serious consequences, they were less likely to adhere to prescription medication recommendations. This study confirmed that understanding how severe an illness is may cause patients to become more focused on preventing poor health care outcomes. In other words, patients who understand the ramifications of nonadherence to prescribed high blood pressure medication are more likely to adhere to medication recommendations. Thus, patients act based on the severity of their illness

such as taking action to reduce pain, which leads to better outcomes overall (Willis, 2018).

### **Physiological Reactions**

The constructs of the HBM categorize physiological reactions as having beliefs about the substantial physical and psychological costs of the recommended action. (Champion & Skinner, 2008). Findings from this study showed that participants experienced reactions from medications that caused them to either discontinue use or skip doses. Therefore, participants exercised their right of autonomy. On many occasions' patients shared that if they experienced any uncomfortable reactions to taking their blood pressure medication then they had no choice but to make decisions based on their body's response to prescribed medication. They either manipulated the method that they were taking their medication, began to skip or miss doses, or halted taking their prescribed medication all together.

### **Limitations of the study**

A few limitations arose during the conducting of this study. First, this study only included African Americans 45 years and older, and all but one was female. This study only encompassed participants who resided within Michigan and had medical insurance. Additionally, this study captured data relevant to nonadherent behavior from the participants' perspective, believing that they were adherent. In addition, factors such as health care coverage, access to care, and quality of care received were not evaluated in this study and were therefore limiting factors. The most significant limitation relates to this being a convenience sample, as it is designed to get some initial information on

health beliefs but no representative of a larger population. The final limitation is potential of researcher bias. Although it was my intention to set aside all biases from this study, this is impossible. Researcher bias is inevitable, and it is in the best interest of the researcher to acknowledge that predisposed bias exists (Moustakas, 1994). Therefore, acknowledging that there may be bias when coding the data of this study was necessary. I organized the data from my perspective without judging each participant. To do so, I recognized my thoughts, separated them from the data, and coded the transcripts based solely on what the participant said. For example, if a participant said that they experienced an issue with medication, I coded their response as a physiological reaction. Working from this perspective ensured the credibility of the information, reliability from the data, and the ability for study transferability. In essence, these codes may be applicable and can be used in other research studies related to experiences and high blood pressure.

### **Recommendations**

The purpose of this qualitative phenomenological study was to explore the gap in literature related health beliefs and successful methods to improve medication adherence in African Americans in Michigan. This study's results indicate that beliefs about trust, denial, severity of illness, autonomy, efficacy, relationships, and the effects of physiological reactions are significant influencers when health decisions are merited. Recommendations relating to all seven of these factors are discussed below.

**Trust**

Trust must be established as the foundation between communication before the onset of effective communication between patient and healthcare professionals. Therefore, I would recommend that we work with healthcare professionals to nurture warmer environments that garner doctor-patient trust relationships. In different ways, healthcare professionals may be more inclined to educate their patients while in their care, increasing individualized motivation. This idea might help to foster encouragement for the patient. Transparency may also lead to creating greater trust. Perhaps doctors could be more open about medications' adverse effects and provide solutions for handling reactions. Participants shared that they were more inclined to trust their doctors' orders. Their doctors were more open about the impact of medications instead were given. This method may encourage patients to control their chronic condition with their doctors by their side. However, because time plays a role in care and treatment for patients and that doctors are often busy with demands seeing patients in practice, seeking outside sources for their patients may be an option. Collaborating with researchers may be an option for doctors and procedures. Outside surveys could also serve as gateways to uncover beliefs and determine the best solutions for patients to disseminate information.

**Denial**

This study confirms that patients adhere to medical advice only when they believe that treatment will benefit them. We may want to conduct more research related to uncovering apprehensions with the acceptance of the diagnosis. Perhaps health professionals might create conversations with patients who deny diagnosed illnesses but

wish to be more engaged in making better behavioral choices. Questions that we might seek to get answers should be related to social acceptability, for example, if they believe that environmental and commercial determinants play a role in their non-adherent behavior. More in-depth exploration might help explain if embarrassment or shame plays a role in them seeking care.

### **Severity of Illness**

Addressing the needs of patients who require details of the seriousness of the illness, researchers must continue to emphasize the consequence of how nonadherence may play a role in worsening conditions healthcare for patients. The issue that beliefs play a role in uncontrolled high blood pressure management may change if patients understood the implications of the severity of illness.

### **Autonomy**

In many circumstances, health professionals and researchers may want to confirm that it is plausible that patients advocate for themselves. Health professionals should inform patients that to comply with medical instruction does not mean that patients relinquish their right to advocate for themselves. Doctors should also consider beliefs that dissuade patients from their compliance—perhaps encouraging patients to seek out the best care for themselves and compare the effectiveness. Researchers might continue to find ways to streamline more the intersection of where autonomy and compliance meet and the course of actions that are essential for there to be them to coexist together in overall health. Patients want to trust their doctors alongside their right of autonomy when

decisions are made on their behalf, but only when they trust that their doctors will do what is in their best interest.

### **Efficacy**

For patients who believe that they are capable and show the efficiency of organizing and executing needs to manage their healthcare, self-reporting from patients to their physicians may also serve as a practical method for doctors to keep track of how well patients adhere. Health professionals might like to congratulate their patients' efforts with acknowledgment and admiration. Keeping patients alongside for suggestions when decisions need is interjected on their behalf. Offering their advice on decisions helps make patients feel that their opinions matter when decisions need to be made. We might seek to conduct additional research that uncovers beliefs related to patients' self-efficacy who adhere to their blood pressure medication—interventions to improve medication adherence by recognizing patient's health viewpoints. Health professionals might want to encourage their patients to continue caring for themselves, where their instructions are adhered to by patients.

### **Doctor–Patient Relationships**

To create viable doctor-patient relationships, it would serve professionals and researchers to listen to and create opportunities for participants to share their experiences. It may also help healthcare professionals continue to educate their patients. Researchers educate health professionals about patients and respective health beliefs and patients directly by providing them with the information they need in doctor-patient settings where trust cultivates.

## **Effects of Physiological Reactions**

Healthcare professionals may want to brainstorm ways to reduce side effects by providing upfront alternatives. Or share with patients who are apprehensive to begin new medicines comfort in knowing that medications may present discomfort when prescribing medications for them. Healthcare professionals and researchers may also want to provide advice, for example, reaching out to pharmacies for guidance and instruction.

### **Summary**

Because this excludes other individuals in other cultures in other areas of the county, I recommend that researchers conduct studies beyond African American culture, considering that high blood pressure affects multiple cultures within different regions. It is essential to uncover whether residential locations may influence others diagnosed with high blood pressure. For example, what are the implications of health beliefs for patients diagnosed with high blood pressure who are not adherent based on socioeconomic class? Does social, economic status play a role in medication adherence based on the perspectives of those who have been diagnosed? Do they feel the same about their health, and what beliefs do they have related to maintaining their healthcare? Each of these perspectives would also add value to the body of knowledge that seeks to understand how health beliefs may influence health behaviors.

### **Implications**

#### **Positive Social Change**

Medication nonadherence is associated with increased mortality rates, increased hospitalizations, and increased healthcare service costs (Kini, 2018). This study may have



positive social change implications that may create positive change for individuals, families, organizations, and societal policy. The intention of this study was to promote social change regarding the lived experiences of African Americans who are nonadherent to taking prescribed blood pressure medication. It was my objective that this study could be used to include raised awareness for health professionals, medical researchers, healthcare administrators, and educators regarding health beliefs that result in nonadherence to medical instructions. The results of this study align with researchers who agreed that there are social advantages to engaging those who create public discourse about the disease and health promotion strategies most appropriate to notify policymakers, stakeholders, healthcare professionals, and administrators who work together and make decisions (Bernell & Howard, 2016). Essentially, this study could be used to motivate patients who are nonadherent by allowing them the ability to speak and inform healthcare professionals of what things that they need to stay focused on maintaining their health.

### **Social Change for Individuals**

By interviewing the 12 participants in this study a dialogue regarding adherence to hypertension medication was created. The attempt to understand the lived experiences of the participants and engage them in dialogue increased their willingness to share what they believed and the impact of living with a high blood pressure diagnosis. This study's intent was also to provide a platform for the participants to share and in doing so, this study allowed participants to reveal details about themselves related to the many

influences that came about during our discussions. Likewise, participants were eager to have their voices heard.

The results of this study may help to create additional dialogue for others who share similar experiences. The social implications can be used as a framework for likeminded individuals to build from. Having real life experiences that others can relate to helps to extend the dialogue. Throughout the discussions, participants were able to brainstorm ways that they might overcome obstacles, obtain additional resources to educate themselves, identify different strategies that they could implement to create better relationships with their doctors, discuss how they might be able to change their everyday patterns to ensure that they practice being more medically adherent, and discover how important their beliefs and attitudes are in their general well-being. This study may serve as encouragement for individuals who wish to take more active control of their chronic conditions.

### **Social Change for Family**

Families involved in healthcare for loved ones build support for those in need. The social change implications are that this study and topic can also create dialogue, encourage family members to get involved, educate them on the severity of a hypertension diagnosis, provide them with resources in the event that they need them, provide support for them and their loved ones, and allow them to collaborate with other families who share similar experiences. One of the questions in this study solely focused on getting an understanding of what impact being diagnosed with high blood pressure meant for participants' family members. The goal was to find out the level of

involvement that occurs in each of participants lives. Findings showed that not many family members get involved in such diagnosis, therefore this study might encourage more family support. Thomas et al. (2017) agreed that family relationships can greatly influence the health of loved ones across their individual life spans. Stress and anxiety can undermine progressive health and it is important that families be aware of relationship encouragement through dialogue on the severity and implications of the benefits of nurtured and cultivated family interaction. The social implications that this study may provide is the framework for an environment conducive to dialogue that might encourage pathways to connecting relationships to patient well-being. This study adds to the body of knowledge that nonadherence, discomfort, and encouragement from family members and other loved ones can influence medication adherence.

### **Social Change for Organizations**

This study can serve as the framework for informing healthcare practitioners that it may be beneficial to implement more basic interviewing techniques to engage their patients in dialogue when prescribing medications and confirming compliance. Johnson (2019) found that operative patient-doctor relationship communication positively impacts healthcare outcomes by increasing patient satisfaction, leading to greater patient consideration of health efforts and cares, contributing to improved adherence to prescribed medications, and delivering support and encouragement to patients who need it (Johnson, 2019).

### **Social Change for Societal/Policy**

This study's findings can facilitate creating new strategies and programs that solely focus on cultivating public awareness of the importance of medication adherence. Policy makers with access to findings such as those found in this study, may be able to work with healthcare professionals in collaborative efforts to make decisions toward common goals related to improving medication adherence (Johnson, 2019).

### **Conclusion**

The focus of this study was to offer a consequential understanding of the lived experiences of African American patients with hypertension who are nonadherent to taking their prescribed medication. Research has stopped short of specifically identifying an interpretation for why patients do not adhere to medical instructions from the patient's perspective (Alsalman & Smith, 2013; Long et al., 2017). Regarding trust, there is a need for additional discussions on nonadherence of high blood pressure medication and how trust plays a role in adherence. Patients want to trust their doctors and trust that their doctors will act in their best interest. Past studies have also explained why reliable platforms for patients to share their beliefs are credible sources for increased healthcare outcomes. Research verifies a direct relationship between a patient's perception of the need for a specified treatment and adherence to medicines, the patient's sense of empowerment, self-efficacy, and medication adherence. Research is essential because while trust leads to increased medication adherence, nonadherence leads to increased lack of control of hypertension increased lack of control of hypertension.

Concerning denial, past research discovered there are social benefits to engaging those that would create public dialogue. More consideration may confirm what is known, and interviews reveal what mindsets are concealed. One interview question garnered beliefs related to participants' relationships and if their family members were involved in making decisions about their health care. On many occasions, participants reported loved ones were not active in their health concerns. Hence it may be necessary to alert family members, friends or family, and social support groups of how their roles, reactions, beliefs can help encourage or discourage their loved one's overall healthcare. The use of disseminated information and social support groups might be the vessels for this type of discourse.

For severity of illness, past researchers found that patients changed their behaviors upon onset of illnesses, which verified that patients are aware of how to react when hurt. As for this study, participants acted when they exhibited what they thought might be symptoms from increased high blood pressure. Patients expressed that they were aware of the necessary steps to alleviate discomfort in few cases. Alas, patients who exhibit no symptoms of their illness were less inclined to adhere to medical instruction because their increased blood pressure reactions had not shown outward signs. In like scenarios, the severity of the implications of having been diagnosed with high blood pressure appears to be misinterpreted.

Autonomy is described as the ability to decide what is in the best interest of oneself. For this study, autonomy would apply to beliefs that are made by patients in the best interest of themselves as it relates to adhering to high blood pressure medication

instruction. Findings from this study revealed that participants did make choices for themselves. In many cases, patients made deliberate choices to refuse, skip, or not fill prescriptions prescribed by their doctors. In sum, patients made decisions based on their personal beliefs related to how they felt they should take their high blood pressure medications. Fortunately, participants were engaged in their healthcare regimens and wanted to be trusted that they were making the right decisions for themselves. Participants felt justified in their choices.

Regarding efficacy, findings from this study could encourage patients who believe themselves to be capable of executing behaviors and may promote better abilities to want to adhere to taking prescribed medication. Participants in this study felt encouraged when they made decisions and when their doctors listened to them for their input. For patients who are capable and have the efficacy to organize and execute needs to manage their healthcare, makes self-reporting to their physicians a practical method for doctors to keep track of how well patients adhere.

For doctor-patient relationships, patients want relationships with their doctors. Reasons why relationships are meaningful, are that they build trust, which goes hand in hand with creating patient-doctor relationships. In this case, perhaps there might be more room for time to flourish relationships to allow patients to share with their doctors. Researchers found that patients may not understand their illness; for this study, African Americans who are less inclined to cultivate beliefs cause them not to adhere to their blood pressure medications. Patients want to have relationships with their doctors, which then helps them to trust their doctors.

Concerning effects of physiological reactions, and based on this study's findings, participants described physiological reactions from medications to their high blood pressure medications. Subsequently, participants altered their medication-taking behaviors by manipulating their recommended doses, failing to commence the onset of their prescriptions, or skipping it altogether. Some participants halted taking their prescribed medication entirely. Participants explained their levels of discomfort from the effects of the physiological reactions that they encounter.

To reduce discomfort, literature on counteractions may serve beneficial for participants who take combined medication therapies. Patients knowing what to expect may reduce the amount of anxiety that participants encounter from medications' side effects. Reducing pain may ease the fears, trepidations, and dejection concerning taking their medication because they are uncomfortable that by adhering with their medication regimens, they will automatically feel uncomfortable. Some participants felt that they did not need their medications because they feared what the medications might do. As mentioned above, doctors may want to be more transparent with patients. Advising them of potential side effects of drugs and ways to handle themselves should they encounter physiological effects. Doctors may want to be clear in explaining the potential ramifications that non-adherent behavior can potentially cause, including any additional disadvantages that could arise as new physiological concerns should their patients not adhere to medical advice.

In summary, patients want to be trusted by their doctors. Patients' health beliefs are essential because they indicate why some African Americans do not adhere to

medical instruction. Though this study does not intend to imply that these are the beliefs of all African Americans, results from this study support the foundation of the HBM, which conditions were (a) the person regards themselves as susceptible to an illness, (b) believes that their situation could have potentially severe consequences, (c) deems that a sequence of actions are obtainable, (d) believes that the efforts would be beneficial in reducing either their susceptibility to or severity of the condition and (e) trusts that the anticipated benefits of taking action overshadow the barriers, a person would behave according. This study's findings have provided a foundation of relevant data, methods for improvement, recommendations, and ideas, for improved medication adherence among African Americans diagnosed with high blood pressure.



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## Appendix: Interview Protocol

Study: Exploring Health beliefs of African American patients diagnosed with Hypertension who are not adherent to taking blood pressure medication.

Date: \_\_\_\_ / \_\_\_\_ /20 \_\_\_\_

Time: \_\_\_\_\_ am/pm

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

Researcher's name: \_\_\_\_\_

Participant's name: \_\_\_\_\_

Introduction:

1. I will provide introduction to the study and welcome the participant to the interview.
2. I will share a general outline of the research study and share why the participant was selected to join.
3. I will discuss the interview process with the participant and provide them with a synopsis of the purpose of the study.
4. I will explain that the interview will be recorded and provide an explanation of why the interview will be recorded.
5. I will discuss general plans and anticipated expectations for the interview.
6. I will reassure the participant of the confidentiality of the interview, how data will be stored safely, and reiterate that participants have the right to withdraw from the study at any time and for any reason.
7. I will officially begin the introduction.

“Good afternoon or Evening,

My name is Monique Porter, and I am a doctoral student attending Walden University. I would like to thank you for taking out the time to participate in this study that seeks to explore the health beliefs and nonadherence to prescribed medication among African Americans diagnosed with high blood pressure.”

“You were chosen to participate in this study because you met the requirements to do so. Since this study seeks to understand the health beliefs of African American patients diagnosed with high blood pressure who are not adherent to taking blood pressure medication, your perspective will add value to understanding how African Americans make decisions based on their beliefs. Your experiences may help researchers like myself make advancements to medication adherence research that lack the pertinent data you have chosen to share. Ultimately, I hope that the results of this study will add value to a body of knowledge that seeks to make health professionals aware of underlying reasons for medication nonadherence among patients. I would like to remind you that this study is totally confidential. You can withdraw from any time during the study should you chose to do so without penalty or need to provide a reason. This interview will last for approximately 60 minutes and will be electronically recorded. I would also like to inform you that I will be taking notes during the interview. Please know that any and all information you provide me will be kept on my password locked computer and any written material will be kept in a locked filing cabinet.”

“Once all the interviews have been concluded and transcribed, I will use the data to find common themes. Your name will not be included in the final write up; only some of the information I have collected from the interview.”

“Do you have any questions for me before we proceed?”

“Are you now ready to proceed with the interview?”

The interview will now begin.

“I will also start the reorder.”

“Thank you again for participating.”

**Demographic/ Preliminary questions:**

1. What is your race?
2. What is your ethnicity?
3. What city and state do you live in?
4. What is your highest level of education?
5. Is English your primary language?
6. Have you been diagnosed with high blood pressure?

7. Have you been prescribed high blood pressure medication?
8. How long have you been taking your prescribed high blood pressure medication prescribed by your doctor?
9. Would you say you are adherent to taking your blood pressure medication?
10. Do you know someone that has is 50 or older and has been prescribed hypertension medication?

**Interview Questions:**

1. Please tell me about your experiences with taking blood pressure medication.
2. What is your medication taking behavior routine?
3. How medically adherent would you say that you are? Please explain your managing behavior.
4. Please explain your what medication adherent means to you.
5. How comfortable are you with following your doctor's advice?
6. How important do you think that a relationship with your doctors is to maintain an adherent medication regimen.
7. What specific obstacles have you encountered while managing your high blood pressure diagnosis?
8. Please explain how important you think it is that your doctor helps you with managing your health, in this case adhering to their medical instruction?
9. What challenges or obstacles would you say, if any, do you find get in the way of taking your high blood pressure medication as prescribed by your doctor?
10. In the event that you needed assistance with understanding your high blood pressure medication recommended prescriptions, from whom would you seek guidance?
11. Who do seek help from in navigating through the challenges that you may encounter while managing your high blood pressure experiences?
12. In the past, who have you sought help from to help you steer through getting comfortable with medications prescribed by your doctor?

13. What are your relationships with others like since having been diagnosed with high blood pressure?
14. How important is it that you maintain your high blood pressure in order to live a quality of life?

**Probing words/Transitional Phrases:**

1. “Please explain what you mean by...”
2. “Such as...”
3. “Why do you think that is/occurred...”
4. “How did you feel as a result of that?”
5. “Is there any other information on that subject that you would like to share with me before we proceed?”

**Conclusion:**

“Is there anything besides what we have discussed that you would like to share regarding this topic? Do you have any additional questions that may have surfaced as a result of this interview that you would like to ask?”

“I would like to sincerely thank you for taking the time to participate in this study. Your experiences are invaluable and very much appreciated and needed.”