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Understanding Adherence to Prescribed Medical Regimen to Treat Hypertension Among African American Males

Yolanda Lucian George
Walden University

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Walden University

College of Health Sciences and Public Policy

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Yolanda George

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Walden University
2024

Abstract

Understanding Adherence to Prescribed Medical Regimen to Treat Hypertension Among

African American Males

by

Yolanda George

MSN, Pace University, 2006

BS, St. Joseph College, 2000

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Health

Walden University

February 2024

Abstract

Hypertension is referred to as the silent killer and has been for decades. African Americans have been affected disproportionately compared to Whites, leading to a significant medical and financial burden. The literature has demonstrated that even though African Americans have a similar or better awareness of hypertension, they are more likely to have poorer treatment outcomes and have their hypertension less controlled. In this study, the health belief model and the ecological social model were used as the guiding framework to understand this phenomenon. In this qualitative study, semistructured interviews were used to explore and understand perception of adherence to prescribed medical regimens of African American males with early-onset hypertension. Purposeful and convenient sampling was employed to recruit 14 study participants. The interpretative phenomenological analysis method, template analysis, and coding of emerging thematic categories were employed. The findings of this study demonstrated how cultural beliefs, perceptions, and distrust in the healthcare system, including healthcare providers and Western medications, impacted hypertension medication adherence. The results have implications for effecting positive social change through interventions focusing on the development of self-efficacy and trust facilitated by healthcare providers. These implications as highlighted in the study are the impact of socioeconomic status on healthcare access, poor trust in healthcare providers, low health literacy, cultural diversity awareness, African American males' perception of hypertension, and the need for a blame-free environment for open discussions about medication adherence.

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Dedication

I am dedicating this study to my mentor, religious leader, Dr. Kerr, who always believed in me and kept me buoyant. Dr. Kerr, your encouragement and emotional and spiritual strength you have given me throughout this process kept me inspired and driven.

I also want to say thank you to all my family and friends who believed in me when I wanted to give up.

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Table of Contents

List of Tables	vii
Chapter 1: Introduction to the Study.....	1
Introduction.....	1
Background	4
Problem Statement	5
Purpose of the Study.....	8
Research Questions	10
Theoretical Framework	10
Health Belief Model.....	10
The Social-Ecological Model.....	11
Nature of the Study.....	12
Definitions.....	13
Assumptions.....	14
Scope and Delimitations	15
Limitations	15
Significance of the Study.....	16
Summary	18
Chapter 2: Literature Review	19
Introduction.....	19
Literature Search Strategy.....	20
Search Criteria.....	20

Theoretical Framework	21
HBM	21
SEM	24
Literature Review Related to Key Variables and/or Concepts	28
Hypertension and African American Males’ Related Risk.....	28
Hypertension Medication Adherence.....	29
Cultural Racial Disparity	31
Adherence Perception	32
Health Literacy and Adherence to Hypertension Treatment	34
Socioeconomic Status and Adherence to Hypertension Treatment	35
Summary	36
Chapter 3: Research Method.....	38
Introduction.....	38
Research Design and Rationale.....	38
The Role of the Researcher	42
Methodology.....	44
Participant Selection Logic	44
Number of Participants	45
Participant Selection Criteria	46
Procedure for Recruitment	46
Sampling	47
Instrumentation	48

Procedures for Recruitment, Participation, and Data Collection	50
Follow-Up Procedures	52
Data Analysis Plan	53
Coding Procedures	54
Data Analysis Software.....	55
Discrepant Cases	55
Issues of Trustworthiness.....	55
Credibility	56
Dependability.....	57
Transferability.....	58
Confirmability.....	59
Ethical Procedures.....	60
Conclusion	62
Chapter 4: Results	64
Setting.....	65
Recruitment.....	65
Location	66
Demographics	66
Gender and Race.....	67
Age	67
Marital Status	67
Data Collection	68

Participants.....	69
Data Collection Instruments.....	69
Data Recording	70
Data Analysis	70
Data Analysis Plan	70
Coding Procedures.....	71
Data Analysis Software.....	72
Discrepant Cases	72
Evidence of Trustworthiness.....	73
Credibility	73
Transferability.....	74
Dependability.....	75
Confirmability.....	76
Ethical Procedures and Assurances.....	77
Themes	78
Results.....	80
Theme 1: Knowledge of the Hypertension Prescription	89
Theme 2: Interpersonal and Intrapersonal Relationship and Adherence to Hypertension Medication.....	92
Theme 3: Community Resources and Adherence.....	93
Theme 4: Motivation and Adherence to Hypertension Medication.....	96
Theme 5: Perception of the Condition and Adherence to Medication.....	98

Theme 6: Nonmedical Remedies’ Effects on Adherence to Prescribed	
Medication	100
Theme 7: Health Insurance and Nonadherence	102
Theme 8: Accessibility to Healthcare Providers.....	103
Theme 9: Awareness of Community Resource Availability	104
Theme 10: Socioeconomic Status and Adherence to Hypertension	
Medication	105
Theme 11: Influence Personal Beliefs/Perceptions on Adherence to	
Hypertension Medication.....	106
Summary	109
Chapter 5: Discussion, Conclusions, and Recommendations.....	111
Introduction.....	111
Interpretation of the Findings.....	126
Theme 1: Knowledge of Hypertension Prescription.....	126
Theme 2: Interpersonal Relationships and Adherence to Hypertension	
Medication	127
Theme 3: Community Resources and Adherence.....	129
Theme 4: Motivation and Adherence to Hypertension Medication.....	130
Theme 5: Perception of Condition and Adherence to Medication	132
Theme 6: Nonmedical Remedies’ Effect on Adherence to Prescribed	
Medications.....	133
Theme 7: Health Insurance and Nonadherence	134

Theme 8: Accessibility to Healthcare Providers.....	135
Theme 9: Awareness of Community Resources Availability.....	136
Theme 10: Socioeconomic Status and Adherence to Hypertension	
Medication	137
Theme 11: Influence of Personal Belief /Perception on Adherence to	
Hypertension Medications	139
Limitations of the Study.....	140
Recommendations.....	140
Implications.....	141
Conclusion	142
References.....	146
Appendix A: Interview Protocol.....	192
Appendix B: Interview Questions.....	195

List of Tables

Table 1. Raw Data.....	81
Table 2. Qualitative Findings: Participants' Actual Responses	114
Table 3. Themes and Participants' Responses to Questions.....	124

Chapter 1: Introduction to the Study

Introduction

Hypertension affects 1 in 4 adults in the United States. This disease, if left untreated, can have debilitating effects such as major strokes, coronary heart disease, and renal failure. Paradoxically, hypertension, often referred to as a silent killer, causing individuals serious or fatal harm even before a diagnosis is achieved (Food and Drug Administration, 2021), can be easily diagnosed. This involves multiple accurate blood pressure readings; however, loss of opportunities to diagnose and manage can potentially lead to morbidity and mortality (World Health Organization, 2023).

Historically, hypertension has been defined as the persistent and often progressive elevation in blood pressure (Williams et al., 2014). However, as new scientific evidence regarding hypertension has emerged, modification has been made to this definition to add specificity to this chronic condition. Goetsch et al., (2021a), in their definition of hypertension, quantified hypertension into stages. Stage 1 hypertension in all adults is represented by systolic blood pressure (BP) 130-139/80-89, lowering the definition of hypertension from 140/90 and more. Even more significant regarding hypertension is that prehypertension is now classified as BP 120-129/<80. A normal BP is <120/<80 (Goetsch et al., 2021b). Ramzy (2019) described hypertension as the level of BP at which the benefits of treatment outweigh the risks of treatment, in which the systolic BP values are ≥ 140 mmHg and/or diastolic BP values are ≥ 90 mmHg in younger, middle-aged, and older individuals. Consequently, a hypertensive patient is an individual who a medical professional has diagnosed as having high BP with on average greater than 139 mmHg

systolic, or 90 mm Hg diastolic, on repeated measurement (Berg, 2017). Risk factors for hypertension include environmental, genetic, and several pathogenesis factors such as obesity and abnormal kidney function, and associated increases in tubular reabsorption initiate hypertension (Hall et al., 2019). Uncontrolled hypertension is a leading risk factor for cardiovascular disease and ranks as the main cause of death in the United States (Zhou et al., 2018). Uncontrolled hypertension is defined as an average systolic blood pressure >140 mmHg or an average diastolic blood pressure > 90 among individuals diagnosed with hypertension or reported use of BP-lowering medication (Centers for Disease Control and Prevention [CDC], 2021).

African Americans represent about 13.4% of the U.S. total population of 325.7 million, but they also represent 55% of individuals with hypertension (CDC, 2019, 2020), which makes African Americans among the highest ethnic group with hypertension in the world. Furthermore, hypertension continues to increase disproportionately among ethnic minority groups, such as African Americans. African Americans develop severe hypertension earlier in life (Williamson & American Heart Association News, [2020], Villines, 2021). Waldron et al. (2019) observed that African Americans suffer a higher incidence of hypertensive emergency, and their prevalence is five times higher than the national average. Schutte et al., (2020), noted that over 40% of African American males develop hypertension in early life. AHA (2022) further asserted that blood vessels stiffness, even in young, healthy African American males, contributes to higher central BP in the body. Historically, the chasm in hypertension and hypertension associated outcomes have revealed that the African American is at a greater disadvantage, resulting

in negative health outcomes (Howard et al., 2018). African Americans have the highest rate of hypertension in the United States, at a rate of 450 per 1,000, and have been found to have the lowest hypertension medication adherence (Abramowitz et al., 2023a).

Although studies have been conducted on hypertension, little is known on how African American males perceive adherence to hypertension self-management, which is needed to address the prevalence of hypertension among African American young men. Self-management is the ability of an individual to actively engage in identifying challenges and solve problems related to their illness (van Smoorenburg et al., 2019). This has three layers: (a) medical, which demonstrates understanding medication and dietary adherence; (b) behavior management, which entails acquiring behavior relevant to chronic disease; and (c) emotional management, which is how the individual changes emotions such as fright and frustration and despite related to chronic diseases (van Smoorenburg et al., 2019). Inadequate adherence to hypertension medication can lead to increased morbidity and mortality among African American males who develop hypertension early (Urhoghide et al., 2023). Therefore, a deeper understanding of how African American males perceive hypertension self-management adherence and how that could have profound social implications has become critical. As a result, in this study, I examined African American males' self-management adherence perception of hypertension early on. Such understanding is vital in developing effective strategies to improve self-management adherence and health outcomes to reduce morbidity and mortality among this group.

Background

Medication nonadherence is multifactorial and has been observed in different ethnic and racial groups (Xie et al., 2019). To elaborate on the contributing multifactorial causes of medication nonadherence, social and economic factors, therapy-related factors, disease-related factors, and patient-related and health care systems have been identified as noteworthy. In the African American community, nonadherence to medication regimens has been intricately linked with racial discrimination, necessitating the need for physicians and other healthcare providers to be effective mediators for building trust among African Americans in the health care system (Cuffee et al., 2020; Kleinsinger, 2018). Attaining insight into adherence perception in the African American population can assist in creating and implementing interventions to improve adherence in this population.

African Americans have the highest prevalence of hypertension in the United States and are disproportionately affected by the adverse effects of hypertension and medication nonadherence. It has been estimated that over 36,524 deaths annually are the result of hypertensive complications (CDC, 2021). Burnier and Egan (2019) and Choudhry et al. (2021) supported the premise of inadequate adherence to hypertension medication by African American males as a significant contributor to ineffective BP control. The overall reason for this disparity is poorly understood. However, the historicity of medical mistreatment of African Americans provides a clue for the general mistrust in medical care, reluctance to seek care, and inadequate adherence to prescribed medical regimens (Hammond, 2010; Hostetter & Klein, 2021). In addition, for many

African American males, the painful experiences with racial discrimination fuel mistrust in health providers and the health care system.

Kleinsinger (2018) noted that nonadherence to medical treatment has severe implications for patients and healthcare professionals across the country. Moreover, Reynolds et al. (2018) reported that chronic diseases impact public health and characteristically require long-term supervision, care, and observation, increasing the financial burden on the individual community and overall public health system. Thus, I studied the perceptions of treatment adherence by African American males in managing hypertension and implications for intervention to improve treatment adherence in this population.

Problem Statement

Nonadherence to prescribed medication is closely linked to adverse health outcomes and is also a significant public health concern. Furthermore, there is a known racial inequality that exists in hypertension and hypertension-related outcomes among the racial divide, with African Americans bearing the burden for negative health outcome. Ferdinand et al. (2020) and Donneyong et al. (2021) commented that researchers have proposed that the perception of hypertension treatment adherence influences the disease outcome. However, there is a lack of understanding of adherence perception in African Americans, especially in African American males with early-onset hypertension. *Early onset* in this research study was defined as individuals between the ages of 18 to 44 with a diagnosis of hypertension. Nonadherence to antihypertensive medication negatively impacts BP control. In this study, I aimed to understand hypertension medication

adherence perception in African American males with early onset hypertension and why they are not adherent to prescribed medications to treat hypertension.

Hypertension is a leading risk factor for cardiovascular disease (Kjeldsen, 2017) and ranks as the leading cause of death in the United States (CDC, 2020). Approximately 119 million individuals in the United States have hypertension (CDC, 2021). It has been reported that 81% of these individuals have an awareness they have hypertension, 79.1% are being treated, and 22.5% are adequately treated (CDC, 2023). As hypertension continues to grow disproportionately among ethnic minority groups in the United States, African American males bear the brunt of this burden, due to nonadherence to hypertension medication prescriptions, inadequate knowledge regarding prevention, and inadequate self-management (Abegaz, et al., 2017). A recent report published by the AHA (2022b) and the APS (2017) found that over 40% of African American males developed hypertension in early life, which between the ages of 18 to 44. Thomas et al., (2018a) also reported that even in young, healthy African American males, the blood vessels were often stiffer than in their White counterparts at the same age, contributing to higher central BP in the body. Despite being identified as having the highest incidence of hypertension in the United States, nonadherence has been noted in the context of numerous other health related concerns (Adinkrah et al., 2020).

A literature search revealed many definitions for hypertension; however, William et al.'s (2014) definition captured the essence of the chronicity of this condition. After examining the many definitions, William et al. defined hypertension as the persistent and often progressive elevation in BP, the force of blood pushing against the walls in the

vessels. Additionally, a hypertensive individual has been diagnosed by a medical professional as having high BP with, on average, greater than 139 mmHg systolic or 90 mm Hg diastolic on repeated measurement (Berg, 2017). Key risk factors for hypertension include environmental, genetic, and several pathogenesis factors such as obesity and salt sensitivity activation of the renin-angiotensin system (i.e., structural damage to the kidneys), endothelium vascular response, among others (Howard et al., 2018). Compounding this issue is the inadequate information to support why the African American population is more likely to have poorly controlled hypertension that is more severe (Egan, 2022). Gu et al. (2017) supported this concern and likewise suggested that increased effort should focus on understanding the reason for racial disparities in hypertension management in African Americans in U.S. hypertension trials. In brief, hypertension, prevalence, morbidity, and mortality are significantly higher for African American males (Saeed et al., 2020).

Hypertension prevalence differs by race (Al Kibria, 2019). Perceptions and experiences of adherence to hypertension medications also vary by ethnicity and gender (Spikes et al., 2020). Medicines for chronic disease can only be effective if taken as prescribed. Whether intentional or unintentional, nonadherers have lower perceptions of the importance of adhering to prescribed medication for their disease condition when compared to individuals who are adherent (Anghel et al., 2019; Clifford et al., 2007; Yap et al., 2016). Nonadherence among African American males with early onset of hypertension has been compounded because hypertension is a significant public health burden to the already overburdened public health system in the United States.

Hypertension disease often results in the morbidity and mortality of African Americans who have hypertension, contributing to a loss of human resources (Aggarwal et al., 2020). The premise of this research was to attain a better understanding of why African American males do not adhere to prescribed regimens to treat hypertension.

Purpose of the Study

The purpose of this study was to comprehensively investigate the intricate reasons behind the lack of adherence to hypertension therapy among African American males afflicted with early-onset hypertension, encompassing individual beliefs and social dynamics (Dunklin, 2020). In addition, I aimed to meticulously scrutinize the multifaceted roles played by intrapersonal factors such as perceived risk and personal beliefs and interpersonal factors encompassing social support, social networks, as well as community and healthcare institutions, in shaping the decision-making process concerning medication adherence (Anghel et al., 2019; Clifford et al., 2007; Yap et al., 2016). Finally, I aimed to make a substantial contribution to comprehending the underlying causes for the failure of African Americans diagnosed with early-onset hypertension to sustain adherence to prescribed medication treatments (Dunklin, 2020). I addressed an underexplored domain, underpinned by profound public health significance, as underscored by the substantial morbidity and mortality rates afflicting African American males due to hypertension-related complications (Dunklin, 2020).

The longevity differentials are striking, with normotensive men enjoying 5.1 to 4.9 additional years of life compared to their hypertensive counterparts (Dunkin, 2020). Therefore, grasping the reasons behind the nonadherence of African American males to

prescribed hypertension regimens is of paramount importance (Dunkin, 2020). Notably, the prevalence of hypertension varies by racial demographics (Al Kibria, 2019). A marked contrast emerges, as White, Asian, and Hispanic adults exhibit notably lower rates of hypertension than their Black counterparts (Fei et al., 2017). Specifically, age-standardized prevalence stands at 27.5% for White, 43.5% for Black, 38.0% for Asian, and 33.0% for Hispanic adults (Fei et al., 2017). Further complexity surfaces as perceptions and adherence experiences with hypertension medications diverge along lines of ethnicity and gender (Spikes et al., 2020). The efficacy of medicines designed for chronic ailments hinges entirely on adherence to prescribed regimens (Anghel et al., 2019; Clifford et al., 2007a; Yap et al., 2016). Whether driven by intention or circumstance, nonadherence highlights a diminished perception regarding the significance of adhering to prescribed medication in contrast to their adherent counterparts (Anghel et al., 2019; Clifford et al., 2007b; Yap et al., 2016). Nonadherence among African American males grappling with early-onset hypertension casts an onerous burden on the strained United States public health system (Adinkrah et al., 2020). The toll of hypertension often manifests as morbidity and mortality within the African American population, contributing to a depletion of valuable human resources (Macleod et al., 2022).

In essence, in this study, I aimed to comprehensively investigate the intricate factors influencing nonadherence to hypertension therapy among African American males with early-onset hypertension, encompassing both individual beliefs and social dynamics (see Dunkin, 2020), while shedding light on the underlying causes that

contribute to the suboptimal medication adherence in this demographic (see Anghel et al., 2019; Clifford et al., 2007; Yap et al., 2016), thereby addressing a critical gap in public health knowledge (Dunklin, 2020).

Research Questions

This study was based on the following research questions (RQs):

RQ1: How influential is health literacy on adherence to hypertension medication among African American males with early-onset hypertension?

RQ2: How does interaction with family, friends, and workplace influence adherence to hypertension medications among African American males?

RQ3: How does socioeconomic status influence African American males with early on-set hypertension perception of hypertension?

RQ4: How do cultural beliefs influence adherence to hypertension medication among African American males?

Theoretical Framework

This study was based on two theoretical frameworks: the health belief model and the social ecological model. These two theoretical frameworks were chosen because they provided me the avenue to explore and understand the perceptions and beliefs that lead to behaviors that influence health decisions and outcomes.

Health Belief Model

Hochbaum et al., (1992) Rosenstock, (1974), and other social psychologists developed the health belief model (HBM) in the 1950s to explain why individuals actively fail to participate in preventive health disease programs. The HBM is one of the

most widely used conceptual frameworks for exploring health behaviors. Among the successful applications of the HBM was the 1952 preventive health services screening for tuberculosis. HBM efficacy was subsequently used to detect public health concerns regarding cervical cancer screening and polio immunization (Rosenstock, 1974).

Martinez et al., (2016) used this model to explore how African Americans' physical activity and nutritional intervention change behavior. Moreover, Mamaghani et al. (2020) conducted a study investigating adherence to hypertension medication among rural patients. They concluded that the health outcome was poor because of poor insight in perceived susceptibility, severity perceived benefits, and scarcity in lifestyle. In brief, understanding patient perception was invaluable for understanding the patient's perception of medications. The appropriate application of the HBM to hypertension facilitated effective intervention for behavioral change in hypertension adherence (Onoruoiza et al., 2015; Osamor & Ojelabi, 2017).

The Social-Ecological Model

The social-ecological model (SEM) is built on the premise that health behavior is affected by the interactive effects of personal and environmental factors. The premise of the SEM is that health is influential at multiple levels, not only in the individual, but also environmental, including social supports (friends and family), community, and institutional primary care practitioners and health care facilities (Kumar et al., 2012; Scarneo et al., 2019). This model consists of a 7-level framework that includes intrapersonal, interpersonal, organizational, community, public policy, physical environment, and culture (Bronfenbrenner, 1994). It is also valuable for insight into

subjective beliefs and expectations (Plumb et al., 2012). Poulter et al. (2020) in their quest to issues around nonadherence, acknowledged that adherence is a multidimensional phenomenon influenced by a variety of factors, including the socioeconomic, healthcare care or institutional systems related system, medical related, therapy related, and the patient related concerns in the middle. The SEM framework offered a unique perspective for exploring hypertension intervention at multiple levels, including the individual, environment, and health care organization.

Nature of the Study

I used qualitative research methods to understand why African American males with early onset of hypertension did not adhere to prescribed regimens to treat hypertension. I used a phenomenological approach, which assisted me in gaining insight into African American males' perspectives and experiences regarding the influence of intrapersonal and interpersonal factors as well as barriers to hypertension medication adherence. The phenomenological approach enabled me to obtain a deeper understanding of the expressed experiences of the participants in this study. In phenomenological studies, the relationship between external and internal perceptions is explored (Moustakas, 1994), thereby providing the means to obtain the most accurate information from the research participants and scrutinizing their adherence perception and lived experiences.

After obtaining informed consent, I conducted interviews with a purposeful sample of 14 African American males, aged 18 to 45, with varying degrees of education.

Each participant had a diagnosis of early-onset hypertension and was on one or more prescribed antihypertensive medications.

Definitions

The critical terms for the study are as follows:

Adherence: Medication adherence, or taking medications correctly, is defined as the extent to which patients take medication as prescribed by their doctors. This involves factors such as getting prescriptions filled, remembering to take medication on time, and understanding the directions (U.S. Food and Drug Administration, 2019).

Community: A group of people who reside in a specific location and the relationships between them. It may also involve people who do not live in the area but have a common interest, such as people who work or grew up in the same place. Effective community engagement depends upon the relational bonds between members of the community, and, therefore, strengthening these bonds may be an essential focus. Community engagement happens when the stakeholders or members of a specific community are invited to participate with professional responsibilities (Brunton et al. 2017).

Early onset: Occurring early in an individual's life, especially in relation to other people or ethnic groups with the same disease condition (Collins English Dictionary, 2014). In the context of this study, early onset hypertension was 18 to 45 years. (see Egan, 2021).

Hypertension: Hypertension is the level of BP at which the benefits of treatment outweigh the risks of treatment, in which the systolic BP values are ≥ 140 mmHg and/or

diastolic BP values are ≥ 90 mmHg in younger, middle-aged, and older individuals (Ramzy, 2019; Thomas et al., 2018b).

Institution: Society or organization founded for a religious, educational, social, or similar purpose (Dictionary.com).

Intrapersonal: A relationship occurring within an individual mind or self (Collins Dictionary, 2014).

Interpersonal: The relationship between persons (Collins Dictionary, 2014).

Perception: How an individual regards, understands, or interprets something; a mental impression (West et al., 2023)

Assumptions

Assumptions, theories, and beliefs are all relevant in qualitative research (Creswell, 2013). As such, in this research study, assumptions were made without empirical evidence. I assumed that interview questions would achieve the appropriate response from the participants and that participants would accurately respond to interview questions; I also assumed that the research study participants, who identified as African American, would be willing to participate in the study and would stay active in this research study through the life of the study. Another assumption was that the conduct of the study would be ethical, I would be mindful to cause no harm to the research participants, and I would be thorough documenting findings in a timely fashion and rechecking with participants for clarification and accuracy.

Scope and Delimitations

This research was essential for the understanding of hypertension adherence in African American males with early onset of hypertension and for formulating appropriate interventions. In this section, the scope and delimitation are discussed. The scope of this study was limited to African American males with early onset of hypertension, ages 18 to 45 years of age, who resided in the United States. There are vast numbers of African American males in the United States who have been diagnosed with early-onset hypertension.

The study was focused on the perceptions of African American males regarding prescribed hypertension medication adherence and why African American males do not always adhere to prescribed medication for hypertension. This qualitative methodology consisted of an interview approach, including telephone interviews, face-to-face interviews, and a review of the literature. Because the phenomena studied affected diverse groups with varying degrees, there was little fear for the transferability of this study. There is potential for replicability of this study to other groups, which are in age and racial ethnicity, due to this condition affecting other racial-ethnic groups to varying degrees (Tuval-Mashiach,2021).

Limitations

There were some limitations to this phenomenological research. The sampling methodology chosen was purposive, making the inclusion criteria specific to a particular racial-ethnic group and age range. This study had potential for weakness or bias; biases included sample size, bias in answers, and self-selection bias as a health care provider. I

have had a certain degree of exposure to the concern at hand, and the participants gave cliché rather than individual perceptions, which had the potential to negatively affect the study. Self-selection bias, although this added to the study's limitation, participants' voluntarism was an important component of the study. The impact of self-selection bias was minimized by the respondents being reflective enough to address these biases. Participants were recruited from a wide geographic area in the borough of Brooklyn in New York; this borough was outside my immediate environment. I also employed a screening process that helped me obtain the sample that represented the target population. I kept questions simple and avoided the use of words or phrases that invited bias. In addition, I avoided using words and phrases that invited assumptions. Documentation, recording, and safe keeping of data were conducted in a professional and unbiased manner. Moreover, time was given to build trust with participants, learn the culture, and check and recheck for misinformation, following the guidelines of Walden University.

Significance of the Study

Hypertension is detrimental to the body. A racial disparity exists in hypertension, and African Americans bear the brutal burden of the inequity of this chronic disease, which is more prevalent and destructive in African Americans than in any other racial group (Saeed et al., 2020b). Thus, analyzing the lived experiences of African American males' adherence to prescribed hypertension regimens is crucial because appropriate management of hypertension requires the prescribing of the appropriate drug (Holt et al., 2023). Research has shown that over 50% of individuals with a chronic disease stop taking prescribed medications within the first year of diagnosis, and with nonadherence,

health care costs increase by more than \$100 to 300 billion annually (Pittman, 2020). Furthermore, according to Hinton et al. (2020) and Suvila et al. (2020), the earlier the age of hypertension onset, the more severe the risk of lifelong complications and earlier morbidity. Given that African American males are often diagnosed with early onset hypertension is of great concern, especially since hypertension overall has considerable public health implications (Huang et al., 2022). Ensuring that African American males with early-onset hypertension stay adherent is also essential because lowering BP reduces risks of cardiovascular disease and premature death (Levia et al., 2014; Pettey et al., 2016; Vrijens et al., 2017).

Management and adherence to hypertension medication is influenced by multifactorial barriers (Egan, 2017; Elnaem et al., 2022). In this study, I investigated numerous factors (e.g., intrapersonal, interpersonal, community, and societal) that provided an in-depth understanding of what influences the decision to remain adherent to hypertensive therapy. Findings have the potential to inform health care and public health practice. Consequently, this study contributes to potential social change by increasing understanding of factors influencing adherence to hypertensive medications, which could inform efforts to empower African American males to adhere to prescribed hypertension regimens, potentially improving their health and lifestyle choices. Furthermore, this research adds to the body of existing knowledge on adherence to the prescribed regimen as a treatment for hypertension. It also offers new insights to other researchers seeking to understand early-onset hypertension management in African American males at a younger age (see Niiranen et al., 2017).

Summary

This chapter provided an introduction and background to the research explored. The gap identified in this public health study related to attitudes and beliefs that have influenced hypertension medication adherence perceptions in African American males with early-onset hypertension. Researchers have agreed that African American males face a disparate challenge in hypertension management and hypertension-related outcomes compared to other racial and ethnic groups. The CDC (2020) also expressed concerns about the impact of hypertension and prevention, management, and control on hypertension-related outcomes, as past and current clinical studies have not explained the gap in adherence perceptions for hypertension management in the African American male population.

Chapter 2 presents the literature review and information on previous research conducted on adherence perceptions in African American males with early-onset hypertension. Chapter 2 contains the theoretical framework and a broader description of hypertension risk factors and adherence factors. In Chapter 3, I discuss the rationale for this research and the research methodology employed for the study, including the research design, selection of participants, instrumentation, procedures, and data analysis. Chapter 4 contains a detailed description of the research study's findings as the RQs are reviewed. In Chapter 5, I focus on the interpretation of results, study limitations and strengths, conclusion, recommendations, and implications for social change.

Chapter 2: Literature Review

Introduction

The existence of racial inequities in chronic disease prevalence and management has been well documented. Hypertension among minority groups, especially among African Americans, has reached epic proportions. Abrahamowicz et al., (2023b) noted that the U.S. National Health and Nutrition Examination Survey commented that non-Hispanic Blacks, when compared to other ethnic and racial groups, have lower control of their hypertension. Additionally, this racial/ethnic disparity is not fully understood (Saeed, 2020). African Americans, according to the Office of Minority Health (2022), has increased vulnerability for death from heart disease more than any other racial group in the United States. In 2018, there was a 30% likelihood for African American to die from cardiovascular disease, and although African Americans adults have a 40% probability for high BP, they are less likely to have adequate BP management and control. The term “John Henryism” has been associated with chronic disease such as hypertension, diabetes, and prostate cancer; the premise of John Henryism is that African Americans who are exposed to environments that have deficits in resources are vulnerable for increased psychosocial stressors (Cuffee et al., 2020). More importantly, Cuffee et al. (2020) supported the association that may exist between John Henryism among African Americans and low hypertension medication adherence. In this study, I focused on African American males with early onset hypertension and their perceptions of prescribed hypertension medication adherence. For this research study early onset hypertension is described as hypertension being found in African American males

between the ages of 18 to 44. In this chapter, I incorporate a review of the literature related to hypertension medication adherence and the perception in African American males, the search criteria, the conceptual framework, and search words employed as guidance. I emphasize the importance of medication adherence to achieve hypertension control in African American males, the importance of family and social supports for adherence motivation, and the impact of social determinants of health. This chapter also includes an overview of social disparities in hypertension treatment among ethnic groups, the influence and effects of perception and culture, hypertension medication adherence, and the health consequences of nonadherence to hypertension treatment.

Literature Search Strategy

The literature search focused on using phrases and search criteria to reap more noteworthy results and included this qualitative inquiry's conceptual framework and methodology. I reviewed the most current articles and studies on hypertension management in African American males and adherence to hypertension medication to allow for insight into adherence perception in African American males with early onset hypertension. Inclusive in this literature review were research studies that look at influencing behaviors that lead to the varying perceptions related to adherence.

Search Criteria

This literature review was conducted using a wide range of databases and search engines, including PUBMED, Google Scholar, CINAHL Plus, Science Direct, and medical journals such as the Journal of American College of Cardiology and Journal of Hypertension. Key terms used for the search included the following: *African American*

males, adherence, nonadherence, medication adherence, hypertension adherence, perception, health belief, cultural and ethnic, compliance, disparities, socioeconomic, hypertension prevalence, and health literacy. The critical research of this study was compiled and annotated into a bibliography that outlined search questions. A literature matrix was used to analyze the data collected, methodology, research design, sample, findings, and recommendations.

Theoretical Framework

HBM

In 1952, one of the first renowned successful applications of the HMB was conducted by the United States Public Health Service to explore and understand the underutilization of the preventive health services screening for tuberculosis (Salazar-Austin et al., 2019). Subsequently, the HBM was used to assess and monitor the patient's response and adherence to medical treatment. As a result of the application of the HBM, insight was gleaned into the relationship between an individual belief in the threat of disease and individual belief in the efficacy of recommended lifestyle adaptation that determines positive health outcomes.

The HBM is one of the most widely used conceptual frameworks exploring health behaviors, playing a significant role in preventive health services associating health behavior with health outcomes. The HBM has been used for the detection of public health concerns such as cervical cancer screening and polio immunization (Rosenstock, 1974). Rollins et al. (2018) also used the HBM to assess African American community residents' research participation.

The HMB framework provided flexibility and was easily adaptable for research concerns, especially those relating to behavioral health concerns. There were six primary constructs featured in this framework: risk susceptibility, risk severity, benefit to action, barriers to activity, self-efficacy, and cues to action. Risk susceptibility refers to the individual's perception of vulnerability to developing a health problem (Janz & Becker, 1984). Risk severity speaks to the individual's perception of the seriousness of developing a disease (Antwi et al., 2020). Benefits to action refer to the individual's perception of the effectiveness of available interventions to reduce the threat of the disease (McKellar & Sillence, 2020). Barriers to action refer to the perception of challenges or barriers to implementing recommended health actions (Kanna et al., 2020). Self-efficacy refers to the degree of confidence an individual has in successfully performing a behavior that will improve health outcomes (Janz & Becker, 1984).

As a theoretical framework for this study, the HBM was an indispensable tool that assisted me in obtaining insight into African American males' behavior concerning medication adherence for early-onset hypertension. In using the HBM framework, I considered whether any of the variables were effective mediators. Becker (1974) concluded that personal behavior toward disease is very influential to disease response. Successful application of the HBM to hypertension could thus lead to appropriate intervention for behavioral change in hypertension adherence (Onoruoiza et al., 2015; Orji et al., 2012; Osamor & Ojelabi, 2017).

The HBM has been effective in guiding health professionals in planning interventions for the delivery of health care (Janz & Becker, 1984; Rosenstock, 1974;

Kirscht 1974) created the HBM model as a framework for exploring health behaviors. One of the many benefits of the HMB is that it provides flexibility and is easily adaptable for research concerns especially relating to behavioral health behaviors such as medication nonadherence. Joho (2021) employed the HBM to emphasize potential barriers to hypertension control among individuals with hypertension. Joho acknowledged that there are other variables, such as fear of adverse medication effects, addictions, and inadequate education that are also significant barriers to medication adherence. This demonstrates the need for healthcare practitioners to understand and acquire insight on how hypertension is perceived within the various communities and the need for promotion strategies and treatment interventions that involve fostering patients understanding of hypertension and treatment interventions.

The HBM is not without limitations; however, despite limitations voiced by researchers such as Orji et al. (2012), the HBM model as a social-behavioral framework offers one of the best options for behavioral intervention, especially in the context of adherence. As a model, the HBM creates the option for reasonable appraisal between barriers to action and benefits of activity. The HBM also presents the ready assessment of the perceived seriousness of and susceptibility to an individual's threat of disease; for example, a participant might ask themselves what risk they are taking by not adhering to my BP medication as prescribed. However,, the HBM does give an account of how the individual perceives the threat of uncontrolled BP and what benefit can be gained by adhering to prescribed medications for hypertension. Goldman et al. (2020) noted that positive health belief, such as self-efficacy, is associated with BP reduction.

Long et al. (2017) conducted focus group sessions in which participants answered semistructured interview questions based on the HBM to assess knowledge, attitudes, and beliefs about hypertension and hyperlipidemia management. Long et al. concluded that insufficient knowledge of disease conditions and medication adverse effects challenge adherence to medical regimens. On a more positive note, the study results also emphasized that individuals who had strong social support, positive healthcare experiences, and close family relationships were more likely to comply with self-management strategies. In conclusion, the authors emphasized cultural context as a factor for understanding patients' self-management behaviors and suggested that healthcare providers consider this when treating patients. In brief, the HBM is a useful framework for the investigation and exploration of health behaviors and understanding health beliefs, as also noted by Conner and Norman (2021).

SEM

The SEM is built on the premise that health behavior is affected by interactive effects of personal and environmental factors. Hypertension remains a significant contributor globally and continues to be the leading cause of preventable premature death (Luo et al., 2022). SEM is quite suitable to give a global perspective to any research inquiry on hypertension management in African Americans. It provides the opportunity for promotional activities to be focused on the individual and environment (Caperon et al., 2022; van Kasteren et al., 2020). Medication adherence is multifaceted, and the use of SEM as a framework in this study added flexibility and a broader view that provided the avenue to encompass the many factors that impact medication adherence. The premise of

the SEM is that health is influenced at multiple levels, not only the individual but also the environmental and interpersonal levels, which comprise social supports (friends and family), community, and institutional (primary care practitioners and health care facilities; William & Swierad, 2019). This model consists of the following 7-level framework: intrapersonal, interpersonal, organizational, community, public policy, physical environment, and culture (Bronfenbrenner, 2017). It is also valuable for insights into subjective beliefs and expectations (Balogh et al., 2017; Plumb et al., 2012). The SEM framework offered a unique perspective for exploring hypertension intervention at multiple levels, including the individual, family, friends, environment, and health care organization.

The intrapersonal/individual factor refers to biological or behavioral factors such as knowledge, attitudes, or behavior by the individual that influence adherence choices (Levin et al., 2020). Health-promoting strategies at the individual level promote attitudes, beliefs, and behaviors that lead to adherence. Interpersonal relationships, which include social support such as family and friends, strongly influence health behaviors such as medication adherence. Bahari et al. (2019) noted that family members, friends, and other social relationships, such as positive relationships with doctors, facilitated their hypertension self-management, while barriers included competing for health priorities, lack of disease-specific knowledge, and limited access to community resources. Family members confirmed the importance of their support, participation, and knowledge for facilitating patient self-management.

Interpersonal factors refer to family and social support, factors that were noted to be quite instrumental in encouraging healthy behavior, such as motivating adherence. The converse was also true in that lack of support can be a barrier to health, leading to poor outcomes (Bahari et al., 2019). Gebrezgi et al. (2017) identified patients and their families as perceived facilitators and barriers to hypertension self-management.

The community level facilitates health and well-being or be a source of shame, such as interventions focusing on promoting adherence, including accessibility to health care, support groups, health literacy training, and education on hypertension (Magnani et al. 2018) In contrast, when there is the presence of low socioeconomic status, inadequate education, including hypertension perception, poor nutrition, and fear of impotence, it can create barriers to health promotion. The overarching goal of SEM is to provoke behavior change that will lead to improved health outcomes.

It is believed that there is an emotional component that influences adherence. Wu et al. (2022) explored the relationship between trust in the healthcare system and medication adherence. In addition, a vast majority of physicians and other health care providers believe that nonadherence can result from poor access, financial constraint, and even forgetfulness, which have often been enumerated as viable reasons (Kvarnstrom, et al., 2021) The SEM supports the influence of social determinants of health by providing an appropriate framework for insight on how social determinants influence health outcomes.

Information awareness regarding disease diagnosis, especially chronic disease, is a significant determinant of adherence to a prescribed medical regimen (Noreen et al., 2023). Since as far back as 1999, concerns regarding the link between knowledge deficit

and the decrease in adherence to hypertension medications in African Americans was the top of research discussion (Ni et al., 1999; Sanne et al., 2008). Coughling et al. (2020), noted that inadequate knowledge on adherence of prescribed medications adversely affects both awareness attitudes, presenting major problems in hypertension control. Mensah (2018), in commenting on the hypertension burden bore by African Americans, described this concern as being aggravated by the prevalence of disparity in cardiovascular disease management among African Americans and other underserved groups (Thotamgari et al., 2022). Costa et al. (2015) also stated that intervention programs in case of adherence should be targeted to change behavior. In the context of nonadherence in African Americans, the interventions should be targeted to the African American population specifically to group demonstrating vulnerabilities to chronic disease like hypertension such as the low-income, and uninsured adults beginning treatment for chronic diseases are more likely to be nonadherent to medication, receive inadequate information regarding their medication, and not regularly see their primary care provider (Fernandez-Lazaro et al., 2018).

SEM is a social behavioral model that offers advantages in clinical practice use as well as a research model. Medication adherence has long been recognized as a requirement for positive health outcomes, especially in the management of chronic diseases like hypertension. Furthermore, the burden of cost related to poor medication adherence in the United States has been reported as a billion dollars annually (Amico et al., 2018). However, the public health profession has been challenged to identify a single factor that can effectively influence adherence to medical regimens. Hence, the use of a

social behavioral model such SEM has been shown to be more beneficial. This model offers a comprehensive pattern of factors related to best adherence formulated on evidence gained through research studies, thus creating pathways for best practice interventions (Amico et al., 2018).

Literature Review Related to Key Variables and/or Concepts.

Hypertension and African American Males' Related Risk

Hypertension is the most common, most powerful, and most universal contributor to cardiovascular morbidity and mortality. In the United States, hypertension is a leading risk for cardiovascular disease and ranks as the main cause of death (CDC, 2018). Jaeger et al. (2023) reported in 2018 that an average of 46% of adults in the United States suffer from high BP and hypertension. Among all racial and ethnic groups, African Americans are disproportionately impacted by hypertension (Muntner et al., 2017). In 2017, hypertension prevalence in racial and ethnic population groups was highest among non-Hispanic Blacks (40.3%), followed by Hispanics (27.8%), non-Hispanic Whites (27.8%), and then Asians (25.0%) in the United States (Fryar et al., 2017). African American males are also affected with hypertension at a younger age and with greater severity when compared to other racial and ethnic groups (Suvilla et al., 2020).

Epidemiological data has revealed that hypertension risk occurs across the lifespan in African Americans, including school-age children as early as ten years old, where significantly higher BP is noted in African Americans than their White counterparts of the same age (Ferdinand & Welch, 2007; Carnethon et al., 2017). Hypertension also poses double jeopardy for the African American male in that it is more

common and more destructive than in any other ethnic group (Ferraro & Farmer, 1996; Carnethon et al., 2017). In 2011 Thomas et al. (2018) noted that the age-adjusted hypertension rate in African American adults is more than 50-75% higher when compared to White Americans. As of today, there is no added information suggesting that the age-adjusted rate regarding African American prevalence has changed. However, racial disparity in hypertension and hypertension-related outcomes with African Americans and other racial/ethnic groups is not new. Saeed et al., (2020) contended that for decades there had been an awareness that BP has been persistently and consistently higher and occurs with earlier onset than other racial ethnicities. However, the reason behind this phenomenon remains unclear, suggesting the need for more research into this public health concern.

Hypertension Medication Adherence

“Adherence” and “compliance” are terms often used interchangeably in health care literature. However, in the public health realm, the word compliance also has a negative connotation. Adherence has therefore become the term of preference and, in this paper, is defined as the persistence with which individuals take medication as prescribed (Holmes et al., 2016). Depending on the individual and the perspective, adherence can be rewarding or overwhelming. Neiman et al. (2017) noted that adherence is critical for improving population health. Burnier and Egan, (2019) suggested that nonadherence to medication may be more intentional and not result from forgetfulness, as most physicians and healthcare providers believe. When adherence to prescribed medication is poor or inadequate, the result is an increase in rehospitalization, worsening of the disease

condition, death, personal and monetary loss, and an increase in overall health care cost for the public health system (Gebreyohannes et al., 2019). Medication adherence is often described as complex, and medical professionals play a critical role in assessing and promoting increased adherence, which is key to patients achieving their goals. Lawrence et al. (2017) highlighted health care providers' responsibility to notice behaviors indicative of medication nonadherence. Lawrence et al. also emphasized the importance of vigilance when patients and families are responsible for managing a chronic illness. Additionally, a lack of awareness of the interaction of biological, social, and financial factors can impact patients' treatment adherence.

A fundamental premise of this study is that medication adherence is essential for positive healthcare outcomes (Basset et al., 2020). The WHO affirms that its direct impact on positive results overshadows disease-specific treatment (Kim et al., 2018). Nonadherence to prescribed medications, however, creates substantial public health challenges (Zullig et al., 2018), is costly (Zullig et al., 2018), and means that medication therapy efficacy cannot be monitored or measured (Brown & Bussell, 2011). Indeed, medication adherence is a growing concern among clinicians (Neiman et al., 2017).

Abegaz et al. (2017) identified nonadherence as a risk factor in the care and management of a chronic disease. They found that African Americans' BP control had a 63% inadequacy compared to Whites who had a 50% control inadequacy. Examining the perceptions and experiences in adherence to hypertension medications among African American males is essential to this study. The disproportionate morbidity and mortality burden of cardiovascular disease in African Americans compared to Whites supports this

study's need (Aggrawal et al., 2021). Buck et al. (1986) found that the average age for hypertension diagnosis in Whites and other racial/ethnic groups is 40-69 years. However, African American males are being diagnosed with hypertension onset much earlier (Thomas et al., 2018). Niiranen et al. (2017) found that earlier onset hypertension has an increased risk of hypertension complications and is also associated with increased risk for cardiovascular disease mortality.

Cultural Racial Disparity

The inequity that has risen because of racial and ethnic disparities in hypertension has provoked many studies, with many identifying hypertension medication adherences, as key to control. Yet, there still exists a gap in understanding the reasons for inadequate adherence to hypertension medication in African Americans. Munter et al. (2017) noted a 40% hypertension diagnosis prevalence in African Americans compared to 30% in Whites (Munter et al., 2017), and this prevalence is strongly associated with medication nonadherence. Bazargan et al., (2021) also stated that their research findings supported that racial discrimination and medical distrust also contributed to ethnic disparities in hypertension prevalence.

Using an implicit association test for ethnic and racial bias, Blair et al. (2014) set out to assess whether clinicians' implicit ethnic or racial bias affects hypertension treatment outcomes in African Americans. Blair et al. concluded that even though all patients received the same treatment intensification, African Americans had lower medication adherence and worse hypertension control than Whites, even though all groups had the same degree and level of treatment.

The degree of discordance that exists between patients and their providers is essential to this study. Tan et al. (2021) found that African American beliefs regarding hypertension were not congruent with that of healthcare providers and differed significantly with participants of other ethnic groups. Distrust in medication appears to have been a prevailing trend among many African American participants. Intentional nonadherence has been implied to be a significant barrier that impacted intervention to adherence (Gebreyohannes et al., 2019). Hypertension-related morbidity and mortality are highest among African Americans compared to other racial/ethnic groups (Ferdinand & Saunders, 2006; Saeed et al., 2020). African Americans are more likely to receive a diagnosis of hypertension, with increased vulnerability to adverse clinical consequences of untreated and uncontrolled hypertension (Ogunniyi et al., 2021). Awareness of cultural beliefs and gaining insight into adherence perception is critical for formulating effective health promotion strategies and treatment interventions. Cultural interventions like listening to stories were purported to improve African American adherence to hypertension medication (Tan et al., 2021). Fostering a culture of physical activity has been noted to increase medication adherence among African Americans with hypertension (Bolin et al., 2018). Health and cultural beliefs can be very influential in hypertension treatment in African Americans (Long et al., 2017).

Adherence Perception

Perception and cultural belief have a significant impact on hypertension medication adherence. Tan et al. (2021) noted that even though many patients described a strong belief in personal profitability and the efficacy of hypertension medication,

frequent nonadherence was reported among individuals who stated that they primarily took their hypertension medication to alleviate symptoms. Some also said concurrent and alternative use of home remedies because they would have fewer side effects or dependency risks.

Findings from Mills et al. (2020) revealed that the primary perceived causes of hypertension were diet, stress, unhealthy activities, genetic factors, and obesity. Instead of prescribed medication for hypertension, home remedies were used, and additional methods for improving their symptoms, such as exercise, stress reduction, and weight loss resulted in uncontrolled hypertension.

Individuals who believe that stress caused their hypertension were less likely than others to maintain healthy self-care behaviors, such as keeping doctor visits and following restrictive diets (Luo et al., 2023). The misconception regarding the adverse effects of antihypertensive medication is associated with poor medication adherence (Tan et al., 2017). Bombard et al. (2018) also observed that patients' beliefs were often inconsistent with medical understandings of hypertension and argued that health care professionals could more effectively treat the disease if they first determined the patient's beliefs.

Sudden deaths and disabilities are events that change people's perspectives concerning treatment and motivate them to adhere to their medication regimens. Further, participants' recognition of their own ability to manage the disease increased adherence, as did support from family members, significant others, close friends, and health care providers (Shahin et al., 2021). Confidence and trust in the health care system have been

observed to have improved adherence (Chan et al., 2020; Elder et al., 2012).

Hypertension belief is strongly related to hypertension medication adherence (Spikes et al., 2019).

Health Literacy and Adherence to Hypertension Treatment

Low health literacy is defined as the inability to obtain, securitize, or understand rudimentary health information, access essential health services, or make reasonable decisions for health (Hickey et al., 2018). The U.S. Department of Education indicates that the overall U.S. population is high school (HealthyPeople 2020, 2021). The relationship between inadequate health literacy/low functional literacy and chronic disease has been firmly established, especially among immigrant communities, racial minorities, and the elderly (Neiman et al., 2017; Piatt et al., 2014). The U.S. Department of Health and Human Services acknowledges that even though an individual may have an overall high literacy level, that individual can still have a low health literacy (Healthy People 2020, 2021). Having an adequate health literacy level potentially can increase an individual awareness of his/her responsibility for his/her individual health and even that of family members. Adequate health literacy in this research is defined as the ability to read and understand necessary/important health information such as reading and understanding prescription labels, and appointments (Healthy People 2020, 2021)

Warren-Findlow et al. (2019) and Sepassi et al. (2023) commented on the robust relationship between health literacy and ethnicity. Warren-Findlow et al. (2019) specifically noted that inadequate health literacy is also linked with poor health behaviors and outcomes among adults with hypertension. Muvuka et al., (2020) explained that

despite the hefty cost of low health literacy in America, the prevalence and impact of low health literacy in the African American population is unexplored. With limited information on determinants and effective intervention for this population. The overall negative health outcomes among non-White ethnic minorities, immigrant, and socioeconomic minorities are of great concern, necessitating further research to employ the most appropriate intervention strategies.

Inadequate health literacy on an individual level is seen in behavior associated with nonadherence. From communities and a national policy perspective, public health decision making has been impacted (American Public Health Association, 2010; De Avila et al., 2021), from the perspective of patient interest, there is a need for interventions to decrease unintentional nonadherence (Fan et al., 2017). Additionally, inadequate health literacy has a strong association with nonadherence to medical regimens, an increase in hospitalization, increased economic burden to the public health system, and loss of productivity. More than 50% of the adult population in the U.S. have limited health literacy (Keene Woods et al., 2023; Scott, 2019;).

Socioeconomic Status and Adherence to Hypertension Treatment

The broad context of socioeconomic status (SES) includes employment status, educational level, income, and place of residence (Cuschieri et al., 2017). Furthermore, socioeconomic status is linked with cardiovascular health and has been used to predict behavior (Cuschieri et al., 2017). This also extends to medication adherence, and the combined effect leads to increased mortality and morbidity (Giner-Soriano et al., 2018). Further research is necessary since nonadherence by itself leads to increased

cardiovascular risk (Lee et al., 2019). Fernandez-Lazaro et al. (2018) noted that nonadherence was more common among low-income and uninsured individuals. As a result, these individuals were less informed, receiving inadequate information regarding their medications, and did not regularly visit a health care provider.

Finally, low socioeconomic status is highly associated with higher BP, especially where education is evident (Qin et al., 2022). Low socioeconomic status is just another risk factor for medication nonadherence and warrants further study. Hypertension prevention efforts in African Americans should include childhood and current SES status (Glover et al., 2020).

Summary

Despite the numerous studies on hypertension (Egan et al., 2014; Elder et al., 2012; Fernandez-Lazaro et al., 2018), research specific to African American males and adherence perception is quite limited. This chapter presented the scholarly literature that highlights the need for continued research to achieve adherence in hypertension management and positive hypertension-related outcomes for the African American males disproportionately affected by this chronic disease. Of all the ethnic groups in the United States, African Americans have a greater prevalence of hypertension (46.9%) and carry the more significant burden of the destructive effects of hypertension (Aggarwal et al., 2021) Medication adherence is a powerful driving force behind the racial and ethnic disparity in hypertension management and outcomes (Ferdinand et al., 2017). HBM and SEM will provide guidance and structure and lend a broader perspective towards this inquiry. The multifaceted nature of racial health care disparities suggests the need for

further research and examination to understand what leads to adherence perception in African American males.

Chapter 3: Research Method

Introduction

The purpose of this study was to examine the treatment adherence perception of African American males to gain an understanding of how adherence is perceived in African American males who experience early-onset hypertension. This chapter focuses on the research methodology used, providing details on the research methodology and design, the population sample, the study instrument, and the data collection process and data analysis. In this chapter, I discuss the research design, the rationale for the design, my role as the researcher, and my explanation for dealing with issues of trustworthiness and ethics.

Research Design and Rationale

This study was based on the following four guiding questions:

RQ1: How influential is health literacy on adherence to hypertension medication among African American males with early onset hypertension?

RQ2: How do interactions with family, friends, and the workplace influence adherence to hypertension medications among African American males?

RQ3: How does socio-economic status influence African American males with early on-set hypertension perception of hypertension?

RQ4: How does cultural beliefs influence adherence to hypertension medication among African American males?

I approached this study from an interpretative phenomenological perspective, which allowed me to explore and obtain a descriptive view of the phenomenon under

investigation. This means that I asked questions based on themes of experience. A phenomenological approach enables the researcher to attain a deeper understanding of expressed experiences of the participants in the study. Bevan (2014) proposed that this method of interviewing makes it more feasible for the researcher to gain a more detailed theoretical approach. Foley et al. (2021) also supported this view and proposed the alignment of interviewing and theoretical sampling. In addition, Neubauer et al. (2019) asserted that the phenomenological methodology is well suited for assisting public health practitioners in gaining insight from exploring the lived experiences of others. Moreover, Dalvi and Mekoth (2017) employed interpretive phenomenological analysis to better understand the complexities of chronically ill patients' nonadherence to treatment. Similarly, Qutoshi (2018) observed that the phenomenological approach provides the researcher with the opportunity to collect data while making sense of the data collected at the same time. Phenomenological approaches are also relevant in being descriptive by creating awareness, giving insights, and making visible the research participants' belief motivations and actions (Qutoshi, 2018).

The premise of this study is based on the noted inability of the public health system to control chronic diseases such as hypertension, especially in the African American population, and the resultant consequences leading to the increased public health burden globally (see Bangura et al., 2017). This concern regarding the health and wellbeing of African Americans was brought to public awareness as far back as 1928, according to Noonan et al. (2016), when Louis Israel Dublin accurately stated that only when the "Negro" can favorably be compared to that of the White race can there be an

improvement in their health. Funk (2022) reiterated this concern. However, health inequity for African Americans remains a nagging challenge. The socioecological approach to intervention can provide a pathway to explore the many different layers, including social determinants of health and inadequate access to health services.

Munro et al. (2006) asserted that theoretical approaches to behavior modification have been proven to be the best methodology for intervention and observed that theories offered the most effective pathways for the promotion, treatment adherence, and overall improvement of health outcomes. Even though numerous studies have been done regarding the best approach to behavior modification, none has yet to dispute Munro et al.'s findings. Hagger and Weed (2019) asserted that interventions based on behavioral theory for health promotion are highly effective at an intervention level to support behavior change. It has also been noted that the phenomenological methodology is well suited to assist public health practitioners in gaining insight from exploring the lived experiences of others (Neubauer et al., 2019).

A phenomenological approach is one of the most frequently used qualitative methodologies in doctoral dissertations (Simon & Goes, 2011). Holroyd (2001) also proposed that the phenomenological method is a popular qualitative methodology. Due to its flexibility, the researcher can quickly adapt it to suit the phenomenon. The premise of interpretative phenomenology is that it must be participant oriented. A study methodology provides insight into human experience from the participant's perspective, giving meaning to their lived experiences (Knack, 1984). In this approach, there is no single reality, and each participant brings their reality into the study (Simon & Goes,

2011). This method of inquiry focuses on experiences described by participants, requiring the researcher to change perspective and set aside personal perceptions to gain the insight of the participants without presuppositions (Finlay, 2009; Reid et al., 2005; Simon & Goes 2011).

Interpretative phenomenological analysis (IPA) aims to explore how participants make sense of their personal and social world (Smith & Osborn, 2015). Reid et al. (2005) proposed that understanding lived experience is the bread and butter of IPA. The following are critical elements of IPA followed in this study, as noted by Smith and Osborn (2015). This approach focuses on exploring participants' worldviews and their personal and social experiences.

To understand the participants' worldview, I conducted an in-depth examination of the participants' lives. There were a couple of options offered, such as interviews, observations, and focus groups. I chose interviews. By using this approach, assumptions were avoided, and I was able to capture and explore the meaning of participants' lived experiences. Reid et al. (2005) proposed that participants are the experts regarding their own lived experiences, and from the participants, the researcher is able to gain insight into the phenomenon under study. Second, Reid et al. suggested that IPA supports the researcher's choice to recruit participants for their expertise in the phenomenon studied. Third, IPA reduces the complexity associated with experimental data through robust and systematic analysis. The analysis depends on the process of individuals making sense of the world and their experiences. This includes, most importantly, the participant, and then, secondly, the analyst. The researcher must maintain impartiality, paying keen

attention during analyses on what is distinct about individual participants, with awareness of balancing what was shared by the participants. Finally, analysis that is successful is usually interpretive, with results being subjective in nature and not necessarily factual. Transparency is grounded in examples from data.

Based on the above assertion, the use of IPA was appropriate for this study. With this approach, there was an opportunity for relationship bonding between myself and participants (see Alase, 2017). Also, as a qualitative approach, IPA is participant-focused, giving participants room to express themselves and their lived experiences in an environment free from researcher bias or distortion (Alase, 2017). This approach also provided sufficient flexibility for me and was participant oriented.

Other phenomenological approaches under my consideration were transcendental phenomenology, which is based on principles identified by Husserl (1931) and, later, Moustakas (1994), who converted it to a qualitative methodology that starts from the premise that research studies should focus on the total experience, exploring the core of the participant's experience (as cited in Moerer-Urdahl & Creswell, 2004). Therefore, any preconceived notion regarding research participants or research topic should be dismissed by the researcher, providing room for unbiased data. Moustakas (1994) referred to this as the "Epoche" (p. 180), or the setting aside of prejudgment.

The Role of the Researcher

Becoming a qualitative researcher requires having a change in basic assumptions in thought processes (Xu & Storr, 2012). I am a nurse by profession, and, as a result, had the potential to introduce bias in the interview process. It was important as a qualitative

researcher that bias be reduced whenever possible. Therefore, as a qualitative researcher, it was my responsibility to strive for objectivity, especially in data collection, because I was a significant instrument in this process (see Denzin & Lincoln, 2003). My responsibilities as a qualitative researcher were to responsibly provide a detailed account of the participants' views or perspectives. To accomplish this role successfully, I read questions as they appeared, did not interpret questions for the interviewees, and offered to repeat the question as it had appeared. I also checked and rechecked the coding process, reviewed and adjusted questions that were prone to achieve favorable answers, for example, yes and no responses. Next, I reviewed results with participants and investigated and interpreted data. The gravity of my role led me to a frank self-assessment, creating transparency and achieving participant trust. Moravcsik (2019) argued that transparency is vital for scholarship and credibility. Other means I used included journaling rather than memorizing reflections and insights. As a qualitative researcher, I effectively developed strategies that were effective instruments for data extraction.

Additional roles of the qualitative researcher include asking probing questions, effective listening, and a thought process that leads to creating avenues for deeper connection and understanding. Though I had no prior research experience before engaging in this study, because of my profession as a health care provider, I had the experience of proactively examining and conducting self-exploration for any personal bias or assumptions that shaped my view of this study. I was deliberate in restricting foreknowledge or relationships with potential participants.

Additionally, the researcher's role involves building trust with participants, which was of critical importance for the success and duration of the study. My approach to building trust started with obtaining informed consent and ensuring that I effectively communicated the confidentiality of information. Informed consent was written in an easy-to-understand format, explaining the research process, and ensuring that participants clearly understood what their role entailed, how the research would be conducted, how the findings will be used, and how the information would be communicated to them. The potential for medical research distrust is possible even today, a century after the start of the infamous Tuskegee experiment (1932-1972). As a result of the abuse in the Tuskegee study, many individuals, especially minority groups such as African Americans, have an avid distrust of medical science and are reluctant to participate in research studies (Alsan & Wanamaker 2018). Thus, informed consent was a priority for me in this research study. I informed participants of the confidentiality, informed consent process, and any risk that had the potential to occur to them while they participated in the research study. All signed content was collected prior to starting the interview.

Methodology

Participant Selection Logic

I chose a qualitative (phenomenological) research approach to engage in this study because I was interested in the participants' lived experiences pertaining to their adherence perception. The focus of the methodology aimed at accommodating a semistructured interview process for data collection among African American Males with early onset hypertension. Thematic analysis with constructs formed from the RQs was

used to identify repetitions within the data (see Hansen et al., 2011). Phenomenological studies rely on sample sizes ranging from 10 to 15 participants (Vasileiou et al., 2018). Purposive sampling helps smoothen the eligibility criteria process. In this study, the target population was African American males with hypertension on prescription medication for hypertension treatment who resided in Brooklyn and were between the ages of 18 to 45. More importantly regarding this sampling strategy, even though sample sizes in qualitative research tend to be small, the merit of the purposive sampling is that this sampling strategy provides data rich in information and very much relevant to the phenomena under study. Purposive sampling is known to have great efficiency (Vasileiou, 2018). Thematic analysis is one of the most suitable methods of analysis of participants' experiences, thoughts, and behaviors with constructs formed from the RQs used to identify repetitions within the data (Kiger & Varpio, 2020).

Number of Participants

Phenomenological studies usually rely on a small sample size, ranging from 10 to 15 participants, and, at this size, saturation can be met. The sampling methodology was purposive. Vasileiou et al. (2018) supported the view that a sample size in qualitative research is generally small. I also employed the following principles suggested by Korstjen and Moser (2018) as significant to the success of the sampling strategy to ensure all participants had experienced the phenomenon. These were as follows: (a) The data collection plan should be well-defined and cleared during the collection process; (b) the sampling strategy, when chosen, should yield information consistent with the sampling approach used, and (c) data saturation decides samples; thus, this does not have to be the

same for all research studies. In 1967, Glaser and Strauss developed the concept of theoretical saturation. This concept referred to the premise that there is a point at which collecting more data regarding a theoretical construct will show no new information nor any further theoretical insight (Hennink & Kaiser, 2022). The wider context of this concept can be captured in sample sizes in a homogenous population, such as what I proposed in this study.

Participant Selection Criteria

For inclusion in this study, the participants met the following criteria:

- had a medical diagnosis of hypertension (high BP)
- had been prescribed hypertension medications to control their BP.
- identified as male African Americans
- were between the ages of 18 to 45.
- were residents of the borough of Brooklyn.

When these principles were employed, I was then exposed to a participant pool that was diverse, related, and spoke to the experiences of the phenomenon.

Procedure for Recruitment

The participants were screened before being chosen for this study. The recruitment channels were a church website, Facebook, and manual outreach through the church where a large group of potential participants were found. Speculative messages and recruitment flyers were sent out to potential candidate participants. I generated a list that included the sociodemographic criteria. Participants willingly volunteered to participate in the research study.

Emails were sent to potential participants who expressed the desire to voluntarily participate in the research study. Potential participants were also given the assurance of their privacy and that their email responses were via a secure email that I had sole access to. All personal identifiers were removed prior to the coding and securing of response. Flyers were placed in the church lobby. Facebook was the social media of choice. Advertisements were also done via the church's Facebook platform, allowing potential participants to respond via a secure phone number and email option.

Sampling

To identify study participants, I used purposive sampling. Purposive sampling is nonrandom and provides flexibility in information gathering. Patton (1990) described the purposive sampling strategy as offering an avenue for purposefully selecting information-rich cases. Participants chosen had the characteristics that I was interested in exploring. My initial contact with potential participants was by phone, email, or in-person and helped me gain information regarding the willingness of the then potential participants to participate, their time availability, and whether they fitted the inclusion criteria that I had assigned for the study.

Secondly, during the screening phase of recruitment, I used a prescreening questionnaire that assisted me (see Appendix A). After obtaining my target audience for participants, a brief questionnaire was used to collect background information. This information included demographic information such as education level, marital status, and other socioeconomic factors such as the employment status, social groups, and religious affiliation of the then would-be participants. It provided insight into the

intended participants. The recruitment channels were Facebook and manual outreach through on the local church bulletin board, telephone from which speculative messages to potential candidates were sent and recruitment flyers intended for potential candidate participants who did not used social media.

The process of recruitment and interviewing continued until saturation was achieved. Accommodations were made for the possibility of recruitment results that demonstrated too few participants, consideration for reevaluation of the inclusion criteria, a review and refining of the pre-screening questionnaire, and expansion of recruitment demographics to examine the location and other social demographics. Fortunately, there was not the need for utilization of these accommodations.

Instrumentation

I was the instrument of choice for this qualitative research study. The researcher's role in a qualitative study included the collection of data also known as the data collection instrument (Johnson et al., 2020). The other instrument that was utilized were the interview questions. Interviews played a key role in data collection in qualitative research (Sorrel & Redmond 1995). Phenomenological interviewing is focused on uncovering knowledge of the phenomena under study (Sorrell & Redmond, 1995). In this instance African American males' perception of adherence. To facilitate the interview process was the creation of a research protocol, with questions approved by Walden University. This protocol served as a guide (Lavrakas, 2008) for interviews and obtained data on the adherence perception of African American males with early-onset hypertension. It prompted the researcher on what to say at the beginning of the interview.

An introduction and welcome message were included, also the purpose of the research study, topic of the discussion, collection of the consents from participants, questions formulation, and how to end the interview. This style of data collection gave me the researcher the opportunity to use open ended questions, which was crucial in the interview process, this also provided the opportunity for participants to share their honest thoughts and give feedback (Creswell, 2013).

In this phase of the study, I, the researcher, took the opportunity and demonstrated competence by securing the participants trust additionally explained to participants how confidentiality was implemented and maintained throughout the research process, I obtained consent by the used of the prepared informed consent form, and thoroughly explained the purpose of the research prior to seeking consent. I made assurance that the participants were comfortable, and I asked brief broad questions to open the interview.

For this study, the interviews consisted of semi-structured interview questions in U.S. English and an interview guide with script was created to facilitate the process. The script was based on the theoretical model, and the constructs were as follows: open-ended questions to provide the opportunity for participants expression of their lived experiences; telephone and computer were used in the interview process. The informal interview process helped the participants to freely express ideas, feelings, and motivations regarding hypertension medication adherence. Using this format, I secured the advantage of gathering clear-cut data about the participants' beliefs and motivation.

My chair reviewed and validated the guide to ensure it was rounded and included relevancy to the study. Once this process was completed and IRB approval was obtained,

I started the data collecting process. Schloemer and Schroder (2018) demonstrated that using a checklist of questions assisted in assessing for clarity and relevance of research. This also included the use of a sampling strategy (purposive), data extraction, and analysis. Efforts to strengthen the validity of this process were facilitated by prolonged engagement with participants, including asking for clarification. Interview validation included reviewing data collected with participants and having an efficient audit trail. All coding was recorded in a coding book and frequently compared against the researcher's journal. The interview guide was developed following Patton (1990), who suggested the following categories for questioning: a) behavior, b) perceptions, c) attitudes regarding hypertension diagnosis, d) knowledge regarding hypertension as a disease and reason for treatment, and e) demographics, background, and social supports.

The interview questions were used to explore and gain an understanding of adherence perception of African American males with early onset hypertension. Qualitative interviewing process made available the opportunity for open-ended, in-depth exploration of the phenomena under study (Charmaz 2008) in this instance, adherence perception of African American males with early on set hypertension. Every question was formulated to encourage open dialogue with the research participants for the sharing of their personal experience. I kept a reflective journal for awareness of personal feelings as they arose during the data collecting process.

Procedures for Recruitment, Participation, and Data Collection

After the Walden Institutional Review Board approval (08-30-0068650) had been received from Walden University, I used a purposive sampling scheme to begin the

recruitment process. The interview approach was employed in data collection and ensured refinement of the phenomenological method under an interview. Interviews were chosen as the instrument of choice, since interviews were useful for the discovery of the story under the participants experience; This instrument helped me to explained and better understand and explored the participants opinions and behavior. Interview questions were usually open-ended questions so that in-depth information got extracted from Creswell (1998). Additionally, researchers observed that participants tend to be more honest in their responses (Baumgartner & Heberlein, 1984). Semi structured interviews were used to collect data. I obtained permission from the local conference leader of churches to recruit participants. This request for permission was obtained via email. The email includes all details pertaining to the nature of the study and all correspondence that was intended to be shared with the then would-be participants.

To recruit African American males for this study a church website was used to gain access to participants. I then sent a church wide email to potential participants asking for volunteer for the study. The email invitation for volunteer participation entailed a detail account of the purpose of the study, the study criteria, and my contact information so that potential volunteers were able to respond to me regarding their interest to participate in the study. A purposeful sampling scheme was employed for the selection of potential participants. African American males who expressed interest and met the inclusion criteria for participation in the study were emailed a consent form including a description of how any identifiable information will be removed. The consent form also informed participant of how the interview will be recorded and were given a

detailed explanation of how the information collected will be used in the study. The participants were also asked to reply, “Yes I consent,” via email to participate in the study. I continued recruiting by asking potential research volunteers for names and email addresses of other potential volunteers.

Interviewing provides a direct approach to collecting detailed and frank data (Barrett, 2018) and a flexible medium to collect data, enabling me to tailor my interviews to my RQs. Open-ended and penetrating questions were used to enhance the in-depth questioning in the collection of data. The semi structured interview was conducted at a secured location of participants choice and privacy and confidentiality was ensured. Consent obtained prior to the interview. All interview sessions were captured by hand script, since participants declined audio tape for accurate data extracting purposes. These notes were written verbatim by me, the researcher, and were later be transcribed using actual participants’ words verbatim. All notes were maintained in folders with individual labels such as field notes. The length of each interview session is 45 minutes. Prior to the interview, participants were called, and an explanation of the study was given. They were also asked if they agree to participate. The frequency was daily for six weeks.

Follow-Up Procedures

An allowance was made for follow-up interviews; this procedure was essential to rectify any later discovery pertaining to missing information or an important question pertaining to the research that was either not asked or answered. Every interview concluded with all the participants’ concerns addressed. Signorell et al., (2021) state that this is to process emotions and share more information. Also, the debriefing provides the

opportunity for presenting a summary of the main points, and the participants will have a chance and give feedback as they chose.

Allen (2017) likens the debriefing process for participants as the counterpart to the informed consents which is obtained from participants prior to the beginning of the research process. The debriefing process began at the end of the research process to assist participants to exit the research study. At this stage of the research study, the participants were informed regarding the status of the intent and purpose of the research. This information was either given to participants in person or emailed to them. The following information was included: study title, my name and contact information, in case the participant may have follow-up questions, a thank you to the participants, explanation of the purpose of the research phenomena under study in a simplistic manner that is easily understood. Participants were given the opportunity to withdraw, participants also were made aware that could withdraw consent at any time the research process (if a participant at this time decides to withdraw his personal information will be edited out of the collected data. Participants were also informed of future upcoming provision information regarding the result of the study.

Data Analysis Plan

The research approach of this study helped determine the format for the data analysis procedure. Understanding the participants' lived experiences was of utmost importance for this research project. Groenewald (2004) noted that phenomenological studies utilize anecdotal information acquire from firsthand experiences and interpretation of the phenomena at hand example, how did health literacy (understanding

of hypertension) influence hypertension medication adherence among African American males with early onset hypertension? The focus of this qualitative approach gave a detailed assessment of participants' experience. Using this methodology allowed the researcher (Me) to see and understand the phenomena from the participants' perspective. Data analysis for this research procedure started at the interview phase, here I began recording, and handwriting transcription of all interviews during and after the interviews, to make sure I did not lose opportunity to collect all potential data I in this extraction phase. This was followed by the reading of all transcripts and field notes, then coding and reducing documents (through summarization), and interpreting. Each participant's interview was recorded and immediately transcribed following the interview session. Data was analyzed manually with the aid of a thematic scheme. All collected data, interviews were recorded with participants' awareness and permission and will later be transcribed and entered NVivo software (QSR International) to assist with the organization and analysis of data. Content and thematic analysis was developed iteratively with the application of codes. During the process of thematic formation of data, I the researcher used a highlighter to highlight commonly used words, phrases, and sentences that I deemed to have meaning or can be helpful in creating meaning from data collected.

Coding Procedures

Coding played a significant role in my analysis and helped in the formatting and assigning of data into categories. A systematic approach was used to look for trends, which was later categorize data into themes and other group common themes. A code

book was created based on the RQs and was compared against my research journal for accuracy and to recheck with participants. In doing so, the reliability of the study was ensured.

Data Analysis Software

The NVivo software is used to assist in the creation of attributes and characteristics such as age, educational level, occupation (Zamawe, 2015; Wong, 2008) that made meaning of the data collected and assist in the analysis process. I independently code all interview transcripts and follow-up transcripts with participants.

Discrepant Cases

These cases, though they may be proven contrary to the phenomena, were included in my data reporting. A purposive sample method for data collection was used to understand the sensations rather than to represent a population (2008). Identifying and remarking on contradictory cases demonstrates increased trustworthiness. (Booth et al., 2013). Booth et al., (2013), however noted that even though this process was relevant in demonstrating trust worthiness in qualitative research process, there was however no guidance in how to strategize this process. One of the suggestions cited to assist researcher that I believed was appropriate for me to adopt was the use of purposive sample, which will assist me with a wholistic interpretation of my RQ.

Issues of Trustworthiness

There are four criteria for trustworthiness that must be established by the qualitative researcher: a) credibility, b) dependability, c) transferability, and d) confirmability (Guba & Lincoln, 1989). Trustworthiness serves to underscore that the

research findings are worthy of the reader's attention. Inter-and intra-coder reliability speaks to the processes associated with analyzing data and enhancing trustworthiness and reliability. In this research particular attention will be focus on intra-coder reliability to ensure that data analysis in performed consistently, exhaustive, and systematically to ensure that the entire process is credible (Nowell et al., 2017)

Credibility

Credibility in my research study was facilitated through transparency. Transparency is the most critical criterion in a qualitative research study, and the researcher must demonstrate awareness of this fact (Korstjens & Moser, 2018). In agreement with Korstjens and Moser (2018), I choose to ensure credibility by focusing on in-depth questioning, giving the participants time and opportunity to express their experiences and perceptions, using handwriting recording to capture their wording verbatim. This process was purposeful since the premise in this study was that there was no empirical view; each participant therefore was given the opportunity to tell their story through their own lens (Cutcliffe & McKenna, 1999). I also encouraged the participants to share examples of how they saw the phenomena under study. The worded examples given by participants supported their statements. The journaling of these data was accomplished by using patterns and themes. I also took the opportunity to ask follow-up questions. The goal throughout this process was to obtain saturation. I also reviewed data from raw interview materials to compare my coded transcripts. A participant check was also essential in establishing credibility, and clear, direct, and open communication with

participants remained continuous, ensuring transparency regarding participants' interpretation of their experiences as shared throughout the interview sessions.

Adjunct to these steps, I included an audit trail as I navigated the research process in this study. Inclusive in this audit trail was the grouping of all raw data (journal, notebooks, and documents), any summaries that I created in my data collection, any reconstructed such data that I categorized into themes, interview schedules, questionnaires, and theses that helped in this research study. The interview transcripts were shared with participants for feedback. Throughout the research process, I provided the opportunity for frequent contact with participants via the interview process so that participants also corrected interpretations and challenged any perceived misperceptions.

Dependability

A dependable study must demonstrate accuracy and consistency (Guba & Lincoln, 1989). Using consistency in my data collection and extraction, I created the groundwork for replicability. I utilized the same instrument for each participant in my data extraction process. That is, in my interview process, there was no deviation from one participant to the next in collecting, recording, interpreting, and reporting findings. I used the same verification process for all participants, which consisted of checking my findings of the raw data and comparing and looking for unintentional mistakes while transcribing. I also checked for alignment and consistency with codes and definitions and ensured that these definitions do not shift or change during the process. I continuously monitored and compared all the data to ensure it was supported by written memos regarding specific codes and definitions. Here the audits trail I created was of great

assistance. Also, all interpretations were closely reviewed and examined to ensure that the findings were supported by the data collected.

Guba and Lincoln (1989) proposed that dependability can be evaluated in two ways. The first one was described as a stepwise evaluation which would be effective if there were multiple researchers conducting this research. Because I was the only researcher in the study, I opted for the second method, which was inquiry audit. This entailed an external audit of data and relevant supporting data. My research chair reviewed my research process and performed an external audit of data, documents, and procedures. At the conclusion of this research, findings were easy to read and easily understood by anyone outside of this research project. The research design and findings have been written with simplicity and clarity.

Transferability

Schloemer and Schroder (2018) described transferability as the replicability of a study. In this study, a specific research design and approach to the study have been chosen. The phenomena under investigation, although not specific to any population or group, can affect diverse groups with varying degrees of severity. Participants selected for this research study share the research's particular criteria such as being male, between the ages of 18-45 years of African American descent, living in the United States, having a diagnosis of hypertension, and having been prescribed antihypertensive medications for medical management of their diagnosis. These individuals also bring to the research their individuality, such as their sociodemographic and socioeconomic status and, most notably, their lived experience and interpretations regarding the phenomena under study.

The instrument that will be used for data extraction will be consistent for all participants, including recruitment approach, obtaining of informed consent, and maintenance of anonymity, privacy, and confidentiality. All participants will receive full descriptions of the unstructured / semi-structured interview, how the interview is conducted, the terms of clarity in the questions to be asked, the setting in which the interview will be performed, and the format such as one-to-one video chat. Participants who are comfortable with the one-to-one format and video chatting will be accommodated, and those who prefer telephone and email will also be accommodated. This provides the outside researcher the opportunity to determine transferability status. The results of the study will be reported to all participants in the same format, including descriptive information of participants. This provides insights regarding the demographics of participants, location, and methods (IPA). At the conclusion of this study any interested reader or researcher will be able to apply the methods/results of this study to new research. The reader then has the option to choose to transfer a limited part or a specific part of this research to their own study as desired.

Confirmability

Confirmability focuses on ensuring that the research findings are shaped by the participants and not by me. Once again, my audit trail will aid as I keep a transparent and detailed account of the data collection and all other phases of this research process. It will ensure that I stay accurate with data obtained from the participants. Details regarding notes creation and reconstruction as I summarize raw data and analyze (coding data into themes) will remain accurate and objective. I will also make available for review any

record of my thought process regarding my coding methodology to provide insight into codes that are merged and what the different themes mean.

Also, I will be intentional regarding my thought processes as I collect and analyze data. This is important from the perspective of confirmability because it will force me to examine any background biases or tendencies I may have for subjective input. To maintain objectivity, I will maintain journaling and/or recording of my reflections on my thought processes so that continuous reviews can be done for accuracy in data collection and analysis.

Ethical Procedures

The viability of a research study or dissertation depends on the ethical procedure that the researcher has implemented throughout the research process. In every stage of the research process, ethical issues will be observed. This study will receive approval from Walden University Institutional Review Board prior to its initiation or contact with any potential participants. In 1974 The National Research Act created the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. This law outlined basic principles for the conduct of research and included suggestions as to how to ensure that these principles are exercised. This research study will implement all guidelines to ensure participants' rights are protected, and no harm is done. This study also recognizes that the researcher's role is not arbitrary (CDC, 2020) but is integral to both the generation and interpretation of data.

To ensure that my research procedures are ethically compliant, I will engage in the following steps. First, I will obtain Walden University's IRB approval. Next, I will

assure each participant of complete anonymity and confidentiality of identity; there will be no insertion of identifying information in questionnaires or surveys used for data collection. I will employ clear and transparent written and verbal communication on the nature and purpose of the research. The information that potential participants receive, although basic, will be detailed and formatted to be easily understood by potential participants. As a result, all potential participants will be empowered to be autonomous in their decision-making regarding this research participation, knowing that they can voluntarily decline to participate with no coercion from the researcher.

Each potential participant will sign an informed consent form. A copy of the signed informed consent will be given to each participant, and I will keep one copy securely. I will explain the consent in detail and ensure complete understanding by each participant. In this process, I will also communicate to the participants their right to confidentiality and privacy. As the researcher, I will include on the consent form my name and contact information and that of the dissertation committee. All data collected will be transferred onto my personal computer that is secured by a passcode for access. Data that is entered on hard copy such as signed consents, surveys, journals, and note pads will be kept secured in a locked filing cabinet. I will also undertake steps to fulfill this principle of beneficence by performing benefits versus risk assessments continuously throughout the research process.

All potential participants were made aware by intentional and consistent communication that their involvement is voluntary. Informed consent will be obtained from all potential participants prior to any participation in this research. Communication

given will be clear and transparent, wording regarding information disseminated on the nature of the study essential and detailed so that potential participants easily understand it. Each potential participant must verbalize their assurance of confidentiality.

Most importantly, I will follow all guidelines and recommendations regarding participants to ensure that I am able to justify and effectively communicate the benefits of the study. This will include thorough conduct of the study, the integrity of results, and appropriate communication of findings.

Conclusion

This chapter provided an overview of the research methodology, research-designed data collection, and data analysis process that will be used to conduct this study. Kazdin (2021) described methods as reflecting the total sum of the variety of principles, procedures, and practices that encompass research. In this chapter, I shared insight into the nature of the study and my decision to use IPA to help establish the gap that exists in this phenomenon. Through exploration of the phenomenon with the belief that participants are faithful to their lived experiences, I gained awareness and insight into participants' perceptions, hence creating an avenue for appropriate interventions and social change for this population that is being affected by this phenomenon. In using IPA, I was able to give participants an open-door approach and allowed them to share an unbiased view of their experiences regarding their perception of adherence to their hypertension medication. Also, the opportunity was given for transparency and consistency in data collection, storage, and analysis. Chapter 4 described the approach

used in generating data, the data tracking systems, how themes were uncovered by the research, and the reporting of any discrepant cases that might be encountered.

Chapter 4: Results

The purpose of this qualitative study was (a) to explore why African American males who experienced early-onset hypertension failed to adhere to hypertension therapy; (b) to examine the roles that intrapersonal factors, such as perceived risk and personal beliefs, and interpersonal factors, such as social support and social networks, as well as community and institutions, such as healthcare, have in influencing medication adherence decisions; and (c) to contribute to the understanding of why African Americans diagnosed with early-onset hypertension fail to remain adherent to prescribed medication therapies. To reach potential research participants, I used email and Facebook. I also used posted research flyers in local churches detailing the purpose of the study, the criteria to participate, and my contact information. Participants who met the selection criteria to participate were given a hard copy of my consent form or emailed the consent form. Those who replied “I consent” were subsequently interviewed via telephone or face to face. The entire interview was transcribed verbatim, and no videotaping was done, as per participants’ preference.

In this study, I sought to investigate an under researched area that has significant public health merit, given the high rates of morbidity and mortality experienced by African American males from hypertension (see Ortega et al., 2015).

The study design was supported by Husserl’s descriptive phenomenology of the participants’ experiences and expressed responses to the phenomena. In this chapter, I present responses obtained from interviews conducted with 15 participants. I used NVivo 12 software to assist me in organizing responses into nodes and themes, and then I coded

them for analysis. NVivo is intended for analyzing qualitative data. It is frequently used by researchers, analysts, and other experts who work with qualitative data, including transcripts of interviews, focus groups, and other unstructured data (Zamawe, 2015). Users may efficiently and methodically organize, code, and analyze enormous volumes of qualitative data with the aid of NVivo. NVivo's salient features include coding, which enables users to code data by associating labels or keywords with textual passages (Wong 2008). Users may be able to create connections between various bits of information and recognize patterns and themes in their data as a result. Memorizing as users can annotate their data with notes and comments as they study it, keeping a record of their ideas and observations. This chapter also addresses how the results relate to the research topics and how it was conducted in a way that was congruent with phenomenological qualitative study methodology.

Setting

Recruitment

Once approval was obtained from Walden University IRB, I started the dissemination of flyers, distributing to prospective participants. Initially I posted flyers on local churches' bulletin boards with no response. I then reached out to local health leaders in surrounding churches with still an extremely poor response. Next, I tried face-to-face outreach in local barber shops and a park, and there I obtained over 30 volunteers to be interviewed. The interview dates were set at dates and times convenient to the volunteers. Later, as contact was made, over 60% of these volunteers had to be excluded, not meeting the inclusion criteria due to their age. I then obtained informed consent and

confirmed willingness to participate in my research project. I also ensured that the participants spoke English and verified that all requirements of the inclusion criteria were met.

The dates and times for the set interviews were mostly on weekends, which was convenient for the potential participants. I conducted most interviews on the phone, 60%, with the remaining 40% in person at private spaces of the participants' choice. The interview process, both by phone and in person, was 30 minutes long, except for two participants whose interviews were 45 minutes. All participants declined to have the interview taped but consented for me to transcribe on paper.

Location

The study was conducted in Brooklyn, New York. All participants lived within a 25-mile radius. The study participants were chosen due to easy accessibility and having met all inclusion criteria, which was being an African American male who had early onset of hypertension and who was on prescription medications for management.

Demographics

As mentioned in Chapter 3, the entire population of participants consisted of African American men with a history of early onset hypertension and took prescribed medication for hypertension management. To support the generalizability of my study, participants came from diverse educational backgrounds. This included participants who had completed a high school education and participants with undergraduate and graduate degrees. All participants lived within the Prospect Height and Flatbush areas in Brooklyn.

Although some expressed distinct distrust in the public health system, the participants were willing to share their experience regarding having early onset high BP as young adults and what it meant to them. All participants shared their respect for cultural mores as it related to health management. Participants enthusiastically shared their personal and cultural beliefs on the appropriate management of high BP, prescription medications, efficacy of herbal medicines, and their individual opinions on management of high BP. Participants also shared what disease survival is all about.

Gender and Race

All participants reported being born male. Each identified themselves as males and African American living in Brooklyn, New York. Questions regarding their immigration status were not discussed because some participants expressed suspicion regarding health care and immigration status.

Age

Participants' ages ranged between 18 to 45 years. This age group was chosen because it defined early onset hypertension.

Marital Status

Of the 14 participants interviewed, four participants identified themselves as married, one participant disclosed that he had a live-in mate, and the remaining nine participants noted that they lived alone. All participants remarked that they had extended family members who lived outside their household.

Data Collection

I posted and physically distributed the brief initial questionnaire, in the form of flyers, intended to identify and recruit the study participants. Through flyers on Facebook and the church's website mentioning the intention of the study, these participants were identified and surveyed after the necessary protocols had been observed. The purpose of the initial questionnaire was to identify the participants who met the inclusion criteria (African American males ages 18-45 years living in the Brooklyn borough of New York, diagnosed with hypertension, and taking medication to regulate their BP). Fifteen men were found to be appropriate for the study based on these criteria and the data from the initial flyer.

The data collection method employed in this study was an interview. The interview process was done in two main formats, telephone or face-to-face. Approximately 50% of the interviewees preferred a telephone call, and the others were done face to face interview. The interviews consisted of semistructured interviews. The questions were all open-ended and conducted in English, and an interview guide with a script was created to facilitate the process. The script was based on HBM and the SEM. The constructs were as follows: open-ended questions that provided the opportunity for participants to express their lived experiences by telephone and computer. The informal interview process helped the participants to freely express ideas, feelings, and motivations regarding hypertension medication adherence. This format also enabled me the advantage to gather clear-cut data about the participants' beliefs and motivation.

Participants

The 15 semistructured interviews with male African Americans who had been diagnosed with hypertension functioned as the main source of research data. To prevent any misunderstandings during data analysis, the participants' precise statements were used to code the semistructured interview data at the interview site. To uncover a finding and claim of the phenomenon under inquiry, descriptive phenomenology uses introspection and careful examination of actual experiences instead of emphasizing patterns arising from the examination of factual data (Vagle, 2014).

Data Collection Instruments

The data collection method used was semistructured interviews. The interviews were conducted on the telephone or face-to-face according to the participants' preference. I started posting flyers on a local church bulletin board and then on social media using Facebook, without success. I then started visiting local barber shops and local parks, which proved more fruitful. At this point, I had met over 30 prospective volunteers. Out of the 34 prospective volunteers who initially responded by contacting me for participation in the study, the number was reduced to 15. One of the volunteers requested to sit in with his significant other but did not participate actively in the study; however, by the 14th interview, I had reached saturation. I reviewed the informed consent form and process with participants. I also gave a hard copy of the consent form to some of the participants; however, over 50% chose to give verbal consent instead. After the interviews, I transcribed the collected data and made a couple of follow-up calls for confirmation of data because participants were not willing to be audiotaped. Data

collected were then placed securely in a folder and a locked case to maintain the security and confidentiality.

Data Recording

Data collection for this study included field notes and reflective journaling. No audiotape or videotape recordings were made, as per participants' request. I kept field notes on each participant with the purpose of accurately capturing their experiences and point of view. I maintained my journal to express my own views. This was kept separate from the participant's views and perceptions. Recording of data collected began as soon as the interview was completed in the form of handwritten transcription. All data were handwritten and stored under a lock drawer for safety. I coded the participants' information and field notes and kept them in a locked drawer. The interviews were later transferred to my computer that is locked and protected with a password that only I have access to.

Data Analysis

Data Analysis Plan

The research approach of this study helped determine the format for the data analysis procedure. Understanding the participants' lived experiences is of utmost importance for this research project. Groenewald (2004) noted that phenomenological studies use anecdotal information acquired from subjective experiences and interpretation of the phenomena at hand. For example, how health literacy (understanding of hypertension) influences hypertension medication adherence among African American males with early onset hypertension. Thus, members checking, reviewing reading, and

rereading handwritten transcripts were very integral to the data analysis process in this study. All interviews were transcribed by hand because 100% of the participants interviewed declined to be audio taped during and after the interviews. As a result, I did not lose any opportunity to collect all potential data as I conducted interviews. I reviewed transcripts repeatedly for accuracy and highlighted common phrases, statements, and experiences of each participant. This was followed by the reading of all field notes, then coding and reducing documents (through summarization), and interpretation.

Data were analyzed manually with the aid of a thematic scheme. Content and thematic analysis were developed iteratively with the application of codes. During the process of thematic formation of data, I used a highlighter to highlight commonly used words, phrases, and sentences that I deemed to have meaning or that were helpful in creating meaning from data collected.

Coding Procedures

Themes in phenomenology are not abstractions. Instead, they are threads that combine to generate the phenomenon's entirety. Biases and prejudices of the interviewer and the interviewee are eliminated through researcher postprocessing actions and interactions with the data (Vagle, 2014). Thus, the key motifs shared by all participants characterize the phenomenon in a way that anyone experiencing it may understand (Vagle, 2014). I took part in bracketing exercises all along the way, which included writing notes down right after each interview. I absorbed everything of the auditory information. I then compared the comments from the participants to the literature and

constantly went back to the study questions. I was able to make deductions from the patterns that emerged as a result.

Coding played a significant role in my analysis and helped in the formatting and assigning of data into categories. A systematic approach with the aid of the creation of tables was used to look for trends, that is, to categorize data into themes and other group common themes. A code schematic was created based on the RQs and then compared against my research journal for accuracy and to recheck with participants. In doing so, I ensured the reliability of the study.

Data Analysis Software

The NVivo software was used in the creation of attributes and characteristics such as age, marital status, and educational level (see Wong, 2008; Zamawe, 2015), which assisted me in making meaning of the data collected and in the analysis process. I independently coded all interview transcripts and follow-up transcripts with participants.

Discrepant Cases

During the process of this study, one discrepant case was encountered when a participant decided that he did not want to be interviewed but sat with his significant other during the interview. This was contrary to the phenomena and was included in my data reporting. A purposive sample method for data collection serves to give a better understanding of the theoretical framework (Etikan et al., 2015) Identifying and remarking on contradictory cases demonstrates increased trustworthiness (Booth et al., 2013). Booth et al. (2013), however, noted that even though this process is truly relevant

in demonstrating trustworthiness in a qualitative research process, there is no guidance in how to strategize this process.

Evidence of Trustworthiness

Credibility

Credibility in my research study was facilitated through transparency.

Transparency is the most critical criterion in a qualitative research study, and the researcher must demonstrate awareness of this fact (Korstjens & Moser, 2018). In agreement with Korstjens and Moser (2018), I choose to ensure credibility by focusing on in-depth questioning, giving the participants time and opportunity to express their experiences and perceptions, and captured their wording verbatim. This process was purposeful, since the premise in this study is that there is no empirical view; each participant was given the opportunity to tell their story through their own lens (Cutcliffe & McKenna, 1999). I also encouraged the participants to share examples of how they see the phenomena under study. The worded examples given by participants supported their statements. The journaling of these data was accomplished by using patterns and themes. I also took the opportunity to ask follow-up questions. The goal throughout this process was to obtain saturation. I also reviewed data from raw interview materials to compare my coded transcripts. Participant's check was also essential in establishing credibility, and clear, direct, and open communication with participants was continuous, ensuring transparency regarding participants' interpretation of their experiences as shared throughout the interview sessions.

Adjunct to these steps, I included an audit trail as I navigated the research process in this study. Inclusive in this audit trail was the grouping of all raw data (journal, notebooks, and documents), any summaries that I created in my data collection, any reconstructed such data that I categorized into themes, interview schedules, questionnaires, pilot studies, and theses that helped in this research study. The interview transcripts were also shared with participants for feedback. Throughout the research process, I provided the opportunity for frequent contact with participants via the interview process so that participants will also correct interpretations and challenge any perceived misperceptions.

Transferability

Leung (2015) described transferability as the replicability of a study. In this study, a specific research design and approach to the study had been chosen. The phenomena under investigation, although not specific to any population or group, can affect diverse groups with varying degrees of severity. Participants selected for this research study shared the research particular criteria such as being male, between the ages of 18-45 years of African American descent, living in the United States, having a diagnosis of hypertension, and having been prescribed antihypertensive medications for medical management of their diagnosis. These individuals also brought to the research their individuality, such as their sociodemographic and socioeconomic status and, most notably, their lived experiences and interpretations regarding the phenomena under study. The instrument that was used for data extraction was consistent for all participants, including the recruitment approach, obtaining of informed consent, and maintenance of

anonymity, privacy, and confidentiality. All participants received full descriptions of the unstructured / semi-structured interview, how the interview was conducted, the terms of clarity in the questions to be asked, the setting in which the interview was performed, and the format such as one-to-one video chat. Participants who were comfortable with the one-to-one format were accommodated, and those who preferred telephone and email were also accommodated. This provided the outside researcher the opportunity to determine transferability status (Leung, 2015). The results of the study were reported to all participants in the same format, including descriptive information of participants. This provided insights regarding demographics of participants, location, and methods (IPA). At the conclusion of this study any interested reader or researcher will be able to apply the methods/results of this study to new research. The reader then has the option to choose to transfer a limited part or a specific part of this research to their own study as desired.

Dependability

A dependable study must demonstrate accuracy and consistency (Guba & Lincoln, 1989). Using consistency in my data collection and extraction, I created the groundwork for replicability. I utilized the same instrument for each participant in my data extraction process. In my interview process, there were no deviation from one participant to the next in collecting, recording, interpreting, and reporting findings. I used the same verification process for all participants, which consists of checking my findings of the raw data and comparing and looking for unintentional mistakes while transcribing. I also checked for alignment and consistency with codes and definitions and ensured that

these definitions do not shift or change during the process. I continuously monitored and compared all the data to ensure it was supported by written memos regarding specific codes and definitions. This was where the audit trail I created was of great assistance. Also, all results were closely reviewed and examined to ensure that the findings are supported by the data collected.

Guba and Lincoln (1989) proposed that dependability can be evaluated in two ways. The first one was described as a stepwise evaluation which would be effective if there were multiple researchers conducting this research. Because I was the only researcher in the study, I opted for the second method, which is inquiry audit. This entailed an external audit of data and relevant supporting data. My research chair reviewed my research process and performed an external audit of data, documents, and procedures. At the conclusion of this research, findings were easy to read and easily understood by anyone outside of this research project. The research design and findings will be written with simplicity and clarity.

Confirmability

Confirmability focuses on ensuring that the research findings are shaped by the participants and not by me. Once again, my audit trail aided me as I kept a transparent and detailed account of the data collection and all other phases of this research process. It ensured that I stayed accurate to the data obtained from the participants. Details regarding notes creation and reconstruction as I summarized raw data and analysis (coding data into themes) remained accurate and objective. I also made available for review any record of

my thought process regarding my coding methodology to provide insight into merged codes and what the different themes mean.

Also, I was intentional regarding my thought processes as I collected and analyzed data. This was important from the perspective of confirmability because it challenged me to examine any background biases or tendencies I may have had for subjective input. To maintain objectivity, I maintained journaling and/or recording of my reflections on my thought processes so that continuous reviews can be done for accuracy in data collection and analysis.

Ethical Procedures and Assurances

This research study implemented all guidelines to ensure participant rights were protected and no harm was done. This study also recognized that the researcher's role was not arbitrary (CDC, 2020) but was integral to both the generation and application of data. To ensure that my research procedures were ethically compliant, I engaged in the following steps. First, Next, I assured each participant of complete anonymity and confidentiality of identity; there was no insertion of identifying information in questionnaires or surveys used for data collection. I employed clear and transparent written and verbal communication on the nature and purpose of the research. The information that participants received, although basic, was detailed and formatted to be easily understood by participants. As a result, all participants were empowered to be autonomous in their decision-making regarding the research participation, knowing their option to voluntarily decline to participate with no coercion from the researcher.

Each participant signed an informed consent form. A copy of the signed informed consent was given to each participant, and I kept one copy securely. I explained the consent in detail and ensured complete understanding by each participant. In this process, I also communicated to the participants their right to confidentiality and privacy. As the researcher, I included on the consent form my name and contact information and that of the dissertation committee. All data collected was transferred onto my personal computer, which was secured by a passcode for access. Data entered on hard copy such as signed consents, surveys, journals, and notepads were kept secured in a locked filing cabinet. I also undertook steps to fulfill this principle of beneficence by performing benefits versus risk assessments continuously throughout the research process.

All potential participants were made aware by intentional and consistent communication that their involvement was voluntary. Informed consent will be obtained from all potential participants prior to any participation in this research. Communication given was clear and transparent, wording regarding information disseminated on the nature of the study essential and detailed so that participants easily understand it. Each potential participant must verbalize their assurance of confidentiality. Most importantly, I followed all guidelines and recommendations regarding participants to ensure that I justified and effectively communicated the benefits of the study. This included thorough conduct of the study, the integrity of results, and appropriate communication of findings.

Themes

The purpose of this study was to explore why African American Males who experience early onset hypertension fail to adhere to hypertension therapy and to examine

the roles of intrapersonal factors, such as perceived risk and personal beliefs and interpersonal factors, such as social support and social networks, as well as community and institutions, such as healthcare, have in influencing medication adherence decisions; and (c) to contribute to the understanding of why African Americans diagnosed with early-onset hypertension fail to remain adherent to prescribed medication therapies.

The HBM and the SEM provided the framework to guide the understanding of adherence perception in African Americans with early onset hypertension. The view of these African American males was based on their own individual perception of hypertension medication adherence or their belief that they are not susceptible to the adverse events of hypertension. The motivation for adherence to prescribed medication was central to improving health outcome of African American males with early onset hypertension. These two models were employed to determine awareness of the severity of hypertension and potential morbidity and mortality of hypertension complication.

The participants in this study did not believe that an adverse event could occur to them, there was a demonstration of lack of awareness of the complications associated with untreated hypertension. Although all participants were given varying degrees of hypertension awareness. The information given did not appear to have resonate with them. The participants in sharing their lived experiences shared their belief of the social and environmental factors such poor access to health care service and poor access to healthy food like fruits and vegetables impact of their hypertension disease state.

Results

As I conducted the semi-structured interviews, I had a basic agenda or list of topics to cover but the dialogue was not entirely predetermined and sometimes changed based on the interviewee's responses. This enabled me to delve deeper into the subjects and follow up on any intriguing ideas that surfaced during the discussion. Additionally, it enabled responses that were more elaborate and complex than they might have been in a more formal interview. Semi-structured interviews, in general, can give a richer and more thorough grasp of the interviewee's experiences and viewpoints. The semi structured interview questions were based on the RQs. The themes were developed because of the similarities in interview responses among 14 participants. The themes were as follows:

- knowledge of the hypertension prescription
- interpersonal relationships and adherence to hypertension medication
- community resources and adherence
- motivation and adherence to hypertension medication
- nonmedical remedies' effects on adherence to prescribed medication.
- perception of the condition and adherence to medication
- health insurance and nonadherence
- accessibility to healthcare providers
- socioeconomic status and adherence to hypertension medication
- feelings when faced with the possibility of taking hypertension medications.

Table 1

Table 1 introduce the raw data from participants.

Raw data participants	RQ1	RQ2	RQ3	RQ4
AF			3a. No, I have not. 3b. Yes, I have health insurance. 3c. No every time I call, I get the receptionist, and told I must be scheduled to call. 3d. I do not know of any community resources in my neighborhood. 3e. No	4h. It is possible for herbs to effective for high BP. 4I. I do not take the medications. 4j. Our bodies were made to heal itself
TRW P	1.No I am a nurse 1b. very confident 1c.it is good. 1d. No, I am a nurse. 1.two times a day	2.a yes, I have some serious chronic fatigue. 2b.my pressure is high. 2c. I needed to 2d.it sucks. 2e. yes lots of vegetables and exercise 2f. No, it did not affect my relationship. 2h. lifestyle change diet, fiber, no problem	3a. No, I have never. 3b. Yes, I have health insurance. 3.c. Yes, I have access to my provider. 3.d No I do not know of any community resources that are available to help. 3e.yes green leafy vegetables 3f. No answer	4a.NO 4b. pressure under control 4f herbal medications 4 g Lifestyle change, adhere to medication.
YC	1a.no	2a. BP has to be measure at	3a. No 3b No response	4a. not good

Raw data participants	RQ1	RQ2	RQ3	RQ4
	<p>b. I do not believe in medication. I have a naturopathic doctor.</p> <p>1c. not good</p> <p>1.d no</p> <p>1e. I do not take it; I am a biochemist.</p>	<p>3 different times a day,</p> <p>1b. I do not know.</p> <p>1c no response</p> <p>1d, no response</p> <p>1e. High blood pressure is not a disease.</p> <p>1f. Exercise and diet help control your pressure</p>	<p>3c. no response</p> <p>3e, yes if you have money, you will be able to buy what you want.</p> <p>3f. it is a money-making business</p>	<p>4b destroy your liver.</p> <p>4c. toxic load. A result of what you consume</p>
Halcolm	<p>1a. once in a while.</p> <p>1b. 8/10, I am pretty confident.</p> <p>1c. I think it is good. Most people I know would rather take natural herbs.</p> <p>1d. I do not often, but when I do I ask someone in the medical field.</p> <p>e. As required, but right now what I am taking is finished. (What makes you have to?) Example if I have to take a CDL test.</p>	<p>2a. I do not see it affecting me anyway because I react normally.</p> <p>2b. No, I do not know if there are any. I do not know about it.</p> <p>2c. I have high blood pressure and I take medication for it.</p> <p>2d. Yes, I feel encouraged to do it because I want to get rid of it.</p> <p>2e. I do not feel good about it. I don't want anybody to know I got it.</p>	<p>3a. No. If I stop it is because I do not feel like taking it</p> <p>3b. Yes. lower percentage and then it depends on what medication.</p> <p>3c. yes</p> <p>3d. I do not know.</p> <p>3e. I do not have a stressful job.</p> <p>3f. I consider myself having a good job</p>	<p>4.a. It is good for some people, but I think the best way is by natural herbs.</p> <p>4b. The body is supposed to heal itself.</p> <p>4c. I was like WOW how did this come about? I am exercising, try to eat right, but realized that it is in the family.</p> <p>4d. Yes, sometimes I find myself getting tired.</p> <p>4e. Not really</p> <p>4f. herbs, eating better exercising more no alcohol use.</p>

Raw data participants	RQ1	RQ2	RQ3	RQ4
		<p>2f. For the most part I exercise and eat lots of vegetable and fruits</p> <p>2g. When I go to certain gatherings there is macaroni pie and rice I eat and keep it to a limit (Have you change your diet? - Yes and no I will change it then not for long)</p> <p>2h. Yes, my family knows they are like it's something that has been in the family. My siblings got it too</p>		<p>4g. Check the adverse reaction, if it causes drowsiness, because I drive. I take it at night.</p> <p>4h.yes -because I have seen and heard people that go that route far better.</p> <p>4h. Not good</p> <p>4i. I don't like it.</p> <p>I think doctors, but they don't advise you to see herbalists because they will go out of business if they tell people to go to the herbalist.</p> <p>10.I would advise anyone to take their medications as prescribed but at the same time try to see an herbalist, exercise, and eat better.</p>

Raw data participants	RQ1	RQ2	RQ3	RQ4
PP1	<p>1a. Never</p> <p>1b. very confident</p> <p>1c. not good. It is a scheme to get money.</p> <p>1d. never I.e., do not take it, I take natural herbs</p>	<p>2a. It did not affect me.</p> <p>2b. If they have, I don't know.</p> <p>2c.I have high blood pressure.</p> <p>2d.yes</p> <p>2e no answer</p> <p>2f. It is a good thing.</p> <p>2g. it did not</p> <p>2h, none</p>	<p>3a. No</p> <p>3b. No</p> <p>3C. No, I am a pharmacist.</p> <p>3D. If there is any I do not know</p> <p>3e. of cause it's all about money.</p> <p>3f. Always</p>	<p>4a It is not a cure.</p> <p>4b. It has more bad side effects than the high blood pressure we are treating.</p> <p>4d. none</p> <p>4E. It did not</p> <p>4F.use herbs and medications.</p> <p>4g. I took a purge, I use herbs.</p> <p>4h. yes</p> <p>4 I. I do not take it medication do not cure high blood pressure.</p> <p>4j. I do not trust them.</p> <p>4k it is all about money, when you take medication for high blood pressure it goes to the stomach, and it is change in the stomach</p>
Joyeau	<p>1a. yes, not often</p> <p>1.bWanted to know what it does what is and what is the side effects</p> <p>1c. I think to control, I do not think it is a</p>	<p>2a. I do not think so, when they told me I refused the diagnosis.</p> <p>2bNo, I was not aware that I did my own work on it alone.</p>	<p>3. You go to the doctor, then he diagnosed you, he gives me medication. I said to him that the thought of going to the hospital give me nervous.</p> <p>The first time</p>	<p>4b.I think once I get in the habit of taking it, my body gets accustom.</p> <p>4g. juice I do a little exercise.</p> <p>4h. my problem is if you are giving me medications to</p>

Raw data participants	RQ1	RQ2	RQ3	RQ4
	<p>cure, that is my concern. 1d.it is for one think then then it affects other organs. 1e. three times a day</p>	<p>2c I talk about it with my friends. 2d. yes. It opened my eyes. 2e. You have to make a change. 2f. Yes, I felt shame. 2g. It did not 2h. No, it did not</p>	<p>my blood pressure135/84 he wanted me to take medication. 3a. NO 3b. YES 3c.I never really had to 3d. If they have, I do not know. 3e.no 3.f none</p>	<p>control my pressure do, I still have to exercise, I still have to always try to avoid, still stay my diet</p>
JC	<p>1A. Never 1b Very 1c. It is bad. 1d. Not applicable 1e. Everyday</p>	<p>2a. Not applicable 2b. yes CVS has a blood pressure machine available. 2c, cook with less salt. 2d. yes 2e.I hate it. 2f. I just cook with less salt. 2g. compromise</p>	<p>DECLINED TO ANSWER</p>	<p>4f. I do not know. 4g. I take first thing in the morning. 4h. yes 4i I hate it. 4j pills do not treat the problem.</p>
LM	<p>1A. No 1b. 100% 1c. it is helpful But I rather herbal stuff. 1d. Never 1e. Everyday</p>	<p>2A. No, it runs in my family. 2b. No 2c. I go to the doctor for checkup, and he give me medication. 2d.I agree.</p>	<p>Declined to answer</p>	<p>Declined to answer</p>

Raw data participants	RQ1	RQ2	RQ3	RQ4
PP11	<p>1.No</p> <p>1.I would not take it.</p> <p>1c.I do not want to be dependent on it.</p> <p>1d.no</p> <p>1e.I do not want to take it</p>	<p>2e.I feel terrible about it.</p> <p>My family Is supportive</p> <p>2a. Shock. I say What? I? That is why that's why I am careful with what I eat.</p> <p>2B. No, I do not know.</p> <p>2c. Stay away from salty food. Me, I cook my food and drink lots of water.</p> <p>2d. I like it.</p> <p>2e. It is all about what we eat not about stress, eat right, try to be less stressed.</p> <p>2f. Finding new habit because whatever you are doing is not working.</p>	<p>3a. no</p> <p>3b. yes, I get the receptionist</p>	
HG	<p>1a. No</p> <p>1b. Very confident</p> <p>1c. It leads to take other medications. You take for</p>	<p>2a. It did not. I felt slow and sluggish.</p> <p>2b. Hospital</p> <p>2c. Exercise and eat right.</p>	<p>3a. no</p> <p>3b. Yes, I have health plus.</p> <p>3c. It was easy, I could have call anytime.</p>	<p>4a. It works if you work it, meaning if you belief that it will work when you take it.</p>

Raw data participants	RQ1	RQ2	RQ3	RQ4
	one thing then you need other medications. 1d. never 1e. once a day	2d. Yes, I felt good. 2e. slow down on medicine and see what works for you. 2f. It is a better life. 2g. It an asset 2h. No way	3d. Yes, but I never have to use it. 3e. Yes, if you broke, you do not get good medicine, cheap generic medicine. It you have money you get better care	4b.I felt old, it affected my drive. 4c I had to stop smoking it was no good
FG	1a. No 1b. Yes, I feel confident. 1c. I do not like to take medications. But it works. 1d. I do not have problems understanding. 1e. Once a day	2a. No, it did not. 2b. Not aware 2c. I got high blood pressure. 2d.yes 2e. I feel bad. I don't want it. 2f. I have not really changed anything right now. 2h. Yes, say nothing.	3a. No, I get my medication free. 3b. Yes, I have insurance. 3c.yes just call the office. 3d. No 3e. It makes a difference if you have more money	4a. I do not like taking them. 4b.I expect it to take my pressure down. 4c. It did not feel good.

Raw data participants	RQ1	RQ2	RQ3	RQ4
FB	<p>1a. Never</p> <p>1.b Confident, but I would not take, the medications, I do not like medications.</p> <p>1c. I do not like to take medications.</p> <p>1.d. I do not have problems understanding medical information. daily</p>	<p>2a, None</p> <p>2b. I do not know if there is any.</p> <p>2c. You get high blood pressure when you have too much sodium intake.</p> <p>2d, Yes</p> <p>2f. Feels good, I actually like it. It did not affect me.</p>	<p>3a. No</p> <p>3b. I have insurance.</p> <p>3c.yes</p> <p>3d. No, I am not sure.</p> <p>3e. No, I think it is all about lifestyle. I think so in certain ways diet, intensity of job.</p>	<p>4a.I do not like medications</p> <p>4b. for blood pressure to be improved.</p> <p>4c. No, I was told I had too much sodium in my blood, I had prehypertension.</p> <p>4D. none</p> <p>4e. I changed my lifestyle. I cut down on the salt in my diet I started to exercise, and my blood pressure came down</p> <p>4a. They are good for emergency.</p> <p>4. B To make my blood pressure go down</p> <p>4C. No Answer</p> <p>4d. I did not face any problem.</p> <p>4e no answer</p> <p>4F. They deal with it by not taking control, they become apathetic.</p> <p>4g. Lifestyle change and nothing else.</p> <p>4h. Yes, they make your</p>
PP	<p>1a. Never</p> <p>1b. Very confident because you want to live.</p> <p>1c. It is a good emergency thing. . Good for 30days After 30days we should get off and detox.</p> <p>1d. I have no problems. I took it for a week</p>	<p>2a. It did not</p> <p>2b. No if they have, I do not know.</p> <p>1d.</p> <p>I did it on my own</p> <p>2h. They say we know because I was big and fat. I used to smoke and was told it create a phantom effect.</p>	<p>3a. No</p> <p>3b. Yes, I have health insurance.</p> <p>3c. No</p> <p>3D Ni do not know</p>	<p>4a. They are good for emergency.</p> <p>4. B To make my blood pressure go down</p> <p>4C. No Answer</p> <p>4d. I did not face any problem.</p> <p>4e no answer</p> <p>4F. They deal with it by not taking control, they become apathetic.</p> <p>4g. Lifestyle change and nothing else.</p> <p>4h. Yes, they make your</p>

Raw data participants	RQ1	RQ2	RQ3	RQ4
				pressure go down

Note. Response to the interview questions from the themes, similarity in responses were identified.

Theme 1: Knowledge of the Hypertension Prescription

The results from the semi structured interviews were presented individually. Due to the anonymity compliance, the participants will not be labelled with their actual names but with special identification codes. These are AF, TRW P, YC, Halcolm, PP1, Joyeau, JC, PP11, LM, HG, FG, FB, and PP. The first part of the question involved the literacy question.

The first question was as follows: How often do you have somebody help read your prescription? Most of the participants (12/15) needed no assistance with prescriptions, but Halcolm and Joyeau confirmed that they needed help with prescriptions occasionally. One Participant AF did not answer the question. The rest answered either “no” or “never” on the first part of the question based on RQ1.

The second question was How confident are they in their ability to take their hypertension medication as prescribed? Again, Participant AF did not answer this question. Participant YC does not believe in the medication, therefore (,) it is assumed that he is not confident with it. He also argues that he does not believe in medication because he has a naturopathic doctor. While PP11 does not argue explicitly for having a

personal doctor, he takes a similar stance of no confidence, FG is also not confident with the medications. FB, while confident with the medication, he always takes the cautious approach, where only the trusted medication is taken. Joyeau took a similar approach, but would not trust the treatment easily, as he must know the benefits and the side effects of the medication before taking it. Only eight participants were very confident with the hypertension medication prescriptions. This is still a relatively high number representing 57% of participants.

The third question was about the participants' thoughts about the hypertension medication they have been subjected to. AF did not answer this question. Very few participants believe that it is good medication with the majority thinking that it does not serve its purpose. Those who believed in its effectiveness had some reservations. According to Halcolm who believes it's efficacy, most of his friends take herbal medicine instead of the prescribed hypertension medication since they do not believe in its effectiveness. PP believes that it is only good as an emergency medication but not as a long-term treatment option. He said that "It is a good emergency thing. Good for 30 days, after which we should get off and detox."

These were sentiments shared by HG who says that the medications lead to taking other medications and that once you take for one thing then you need other medications. As such he does not believe in it. PP11 does not take the medications because he believes that it may lead to dependency; as such, may be addictive in future. LM says that while it is helpful, he preferred herbal medicines over the prescribed ones. It is only TRW and P who believed that the hypertension medications are "good." This may be since he is a

nurse and does not hold traditional beliefs like most of the other participants. Otherwise, most of the participants (11/15) or 73% have their reservations on the medication. The other question under RQ1 was on how often do the participants have problems understanding medical information? Eleven of the 14 participants said that they have no problem understanding the medical information. Halcolm does not often have problems understanding medical information but when he does, he reported would ask a professional for clarification or his wife. AG did not answer the question while Joyeau did not give a conclusive answer on the question asked. He said that “it is for one thing then then it affects other organs.”

The last question under RQ1 was on how often do they take their hypertension medication? AG did not answer this question. TRW P, being a nurse, follows the prescription and takes it twice a day. YC, on the other hand, did not take it because he is a biochemist. Halcolm takes it as required only when he must do his physical check-up for his annual commercial driving license physical (CDL). Like YC, PP1 do not take the medication because of personal belief in herbal medicines. JM, LM, HG, FG, FB and Joyeau took the medicine daily with Joyeau taking it thrice a day, FG and HG took it once a day while JM, FB and LM did not specify the frequency. PP11 like PP1 do not take the medications but with no apparent justification. PP took the medication for only a week. These responses showed that while the majority have their own belief on the medications, majority of the participants (10/15) or 69% took the medication but with varying frequencies. This shows that there is misuse of the medication amongst the participants. Only five of the 15 participants do not take the medication.

With these questions, the researcher aimed to understand how health literacy affects adherence to hypertension medication amongst the African American male population in the US. The results showed that there are varied beliefs that hinder full comprehension of hypertension medications, that further affects the rate of adherence to the requirements of the medication.

Theme 2: Interpersonal and Intrapersonal Relationship and Adherence to Hypertension Medication

The next part sought to answer RQ2 which asked how do interactions with family, friends, and the workplace, influence adherence to hypertension medications among African American males? The main point of the RQ was to find out how interpersonal relationships with the surrounding affect adherence to medication.

The first part was on how the hypertension diagnosis and having to take medication affected their relationship with close friends and family members. The first participant AF did not answer any question under RQ2. TRW P said that he has some episodes of serious chronic fatigue that had a serious toll on close relatives and friends who took care of him. These were identical sentiments shared by YC who said that his close friends and relatives have been affected since BP measurements have to be taken thrice daily. Participant PP11 while not agreeing or disagreeing with the question on whether their close friends were affected, was shocked when he received his initial diagnosis, since he had always careful with what he eats. The remaining nine participants representing 69% of the sample said that the family members and close friends did not

affect their relationship with their close friends. This somehow shows that the people around them supported them and understood their situation.

Theme 3: Community Resources and Adherence

To understand how the African American males utilize the available resources to enhance their adherence to medication, the researcher asked whether there are any community resources available to help them in the medical management of their high BP and how the resources impacted their ability to take the medication in accordance with the doctor's prescription. Shiyanbola et al (2018) state that African Americans can improve their adherence to hypertension medicine as prescribed by a doctor in several ways by utilizing community resources, including Joining an advocacy group because there are numerous support groups for people with hypertension in African American communities.

These communities can offer support, motivation, and accountability for taking medication as directed; Use community health clinics because many areas have low-cost or free clinics that can offer hypertension patients medicines and other resources. Additionally, these clinics could include support services such as medication counseling and work with a pharmacist because they can offer useful advice and assistance. According to Shiyanbola et al (2018), (they) can respond to inquiries regarding the drug, assist with any side effects, and offer advice for adhering to the recommended regimen; Join forces with a healthcare professional as it is critical to establish a strong working connection with a medical professional who can offer continuing assistance and direction for treating hypertension.

A healthcare professional can collaborate with patients to design a plan to guarantee adherence and can assist patients in understanding the significance of taking medication as directed; Utilize technology to track medication because globalization and technological evolution has availed a variety of apps and other technological resources that can assist people in tracking their medication and adhering to their recommended schedule. Some applications even offer alerts for reminders to get prescription refills and send reminders to take medications.

The expectations for the results were that the (p)Participants would utilize the community resources to improve their adherence to medication. From the transcribed interview results, (p)Participants AF and YC did not answer the question. TWF P on his part just said that his BP was high. Halcolm said that he was not aware of any community resources and therefore it has not impacted his adherence to hypertension medications. These were similar sentiments shared by Joyeau, LM, PP11, PP, FG, FB and PP1. There were some participants who were aware of the community resources that can be utilized to enhance adherence. For instance, JC while agreeing with Shiyabola et al (2018) assertions that technology is an important resource said that there are numerous BP machines that has enabled him to adhere to the medications. HG also said that the hospital functioned as his greatest support system and has helped him adhere to the medications. However, it is unfortunate that only two participants representing 15% of the population, are aware of the existence of community resources that can be used to enhance hypertension medication. This is against the Shiyabola et al (2018) assertions of the importance of community resources in healthcare. Additionally, it shows a lack of

knowledge due to limited sensitization by the relevant bodies or blatant negligence of community resources by the stakeholders.

Relationships with close people is an important consideration given the support needed. Communication is a key component of the support required. As such, the researcher asked the participants what they will communicate with the close relatives about the condition. AF and YC did not answer this question. The rest of the participants admitted to talking about the condition with the family members. The kind of communication is different because some just talk about the condition to the family members while others talk to the family members about what they can do to avoid the pressure. The majority of 5/13 talks about how family members can support them, for instance by advising them not to cook their food with a lot of salt or help with the exercise. This is in accordance with Ojo et al (2016) findings that There are several ways that family members can support a loved one with hypertension, or high BP including Encouraging them to follow their treatment plan which may include taking medications as prescribed, following a healthy diet, and getting regular exercise; Helping them manage stress as can contribute to high BP, so it is important to help them to find ways to manage stress, such as through relaxation techniques, exercise, or counselling (Ojo et al 2016); Encourage them to make healthy lifestyle changes including quitting smoking, cutting back on alcohol, and getting enough sleep; Encourage them to seek help when needed especially when struggling to manage their hypertension, encourage them to speak with their healthcare provider or a mental health professional.

Theme 4: Motivation and Adherence to Hypertension Medication

Motivation and medication adherence can be difficult for many people, suggest Konstantinou et al (2020). To control conditions, avoid complications, and enhance general health, it was crucial to take medication as directed by a healthcare professional. However, there may be a number of reasons why someone might find it difficult to follow their prescription schedule, including Forgetting; negative effects; expense; and values or beliefs: A chronic ailment can be difficult to manage, and some people may struggle with the responsibility of taking medication on a daily basis due to beliefs or values that conflict with taking medications (Konstantinou et al 2020). All these challenges and difficulties may be down to a crucial factor that is lifestyle changes according to Tan et al (2019). According to Tan et al (2019), Changes in lifestyle can have a big impact on someone's ability to follow their medication schedule. These adjustments could be made to one's daily schedule, food, or level of physical exercise. A person's ability to stick to their medication schedule may be impacted, for instance, if their daily schedule changes and they are not capable of taking their medicine at the same time each day. A person's adherence may also be impacted if their nutrition changes and they are no longer able to take their medication with food as prescribed. Levels of physical activity can impact how well people take their medications. For instance, if a person starts taking their prescription after exercising and becomes increasingly physically active, this may influence the medication's absorption and effectiveness. Overall, it is crucial for people to be aware of how lifestyle changes can affect their capacity to follow their drug regimen, according to Tan et al (2019), and to contact their

healthcare practitioner if they run into any difficulties. In this study, when asked how they felt about their lifestyle changes, Halcom answered, “Yes, I feel encouraged to do it because I want to get rid of it.”

Joyeau also expressed enthusiasm with the life changes stating that it opened his eyes. LM also said that he felt encouraged by the lifestyle changes while HG, FG, FB, PP and PP11 also shared encouraged by the lifestyle changes. However, this is a that many participants did not share within the study. While AG did not answer the question, TRW P said that “it sucks” while YC said that he is not motivated to adhere to the prescription over the lifestyle changes. Overall, the majority, about 77% (10/13) of the participants, showed enthusiasm due to lifestyle changes and were willing to adhere to hypertension medication.

Tan et al (2019) said that lifestyle changes have a tremendous effect on the adherence to hypertension medications. According to Carey et Al (2018), Making lifestyle adjustments is crucial after hypertension is diagnosed to manage the illness and lower the chance of developing major health issues. Making healthy dietary choices, such as consuming less salt, more fruits and vegetables, and foods low in saturated fat and cholesterol, are some lifestyle modifications that may be beneficial. exercising consistently; keeping an appropriate weight; lowering stress because it might lead to an increase in BP; limiting alcohol consumption since excessive alcohol consumption might raise BP; and giving up smoking is advisable because it can harm blood vessels and raise the risk of hypertension. Participant AF and LM did not respond to the question. TRW P said that he had to alter his diet and take in more fiber YC also mentioned diet in addition

to regular exercises, Halcolm gave a similar response adding that he takes in more fruits and vegetables; JC said that he limits the amount of salt he uses while cooking, PP11 said that he likes to explore new habits whenever the current ones are not working, HG said that new lifestyle changes is a new better life, PP quit smoking as a result. While most of the respondents altered their lifestyle others 8/13, three participants' lifestyles were not affected by the conditions.

Theme 5: Perception of the Condition and Adherence to Medication

In answering RQ2, the researcher sought the answer to the question on how the participants felt about their hypertension diagnosis. According to Frost et al (2019), It is reasonable that those who have been given a diagnosis of hypertension, or high BP, may feel overburdened or frightened. High BP is a frequent illness that raises the risk of significant health issues like renal disease, heart attack, and stroke (Frost et al, 2019). People may worry about the effects of hypertension on their general health and well-being as well as the necessity for medication or lifestyle adjustments to control the illness. But it's crucial to remember that hypertension can be efficiently treated with a doctor's assistance (Frost et al 2019). While on the subject, AG did not answer the question. TRW P said that it sucks, while YC offered no response. Halcolm said, "I do not feel good about it. I don't want anybody know I got it."

This indicates that he is ashamed of having the disease. PP1 also decided not to answer his feelings. Joyeau was positive saying that "you have to make changes." This shows that while there is no negativity, he still had to alter some of his family routine to

accommodate the new condition. In keeping up with the positivity, PP11 said, “It is all about what we eat not about stress, eat right, try to be less stress.”

JC and LM felt bad about having the condition with JC going to the extent of hating the condition. HG also says that he hates medications on hypertension, consequently encouraging others to slow down on the medications and see how everything plays out. FG feels bad and does not want the medication while FB and FG did not give any answer regarding the question. In this study, most of the participants are not enthusiastic about having the condition and as advised by Frost et al (2019), it is understandable that having hypertension elicited such reactions. Positivity always works out as the best approach and two participants were positive about the condition. That is 15% of the participants indicating that the majority are likely not to adhere to medication as Shahn et al (2019) found a positive correlation between having negative perceptions and nonadherence to prescribed medications.

To better cope with the condition, the close support system including close family members and close friends must be present. Having hypertension is a difficult challenge as it requires adherence to a specific diet, appropriate exercise and conducive environment that has minimal stress for its proper management. Consequently, there are sacrifices that are bound to be made and some sacrifices can alter the relationship between the patient and the close support system. Therefore, the researcher asked the participants on the feelings about their feelings on the sacrifices they must make to manage the condition and how those sacrifices have altered their relationship with the support system. AG did not answer this question, while TWR P said that the condition

has not impacted his interactions with anybody. YC just said that high BP is not a disease, while Halcolm also asked not to answer the question, PP1 said that it is not a good thing. Joyeau also agreed by saying that he felt shame. LM did not answer, while PP11 said that his family is very supportive. FB also says that it did not affect him and his interactions with other people.

Overall, the results showed that the majority of African American are constantly fighting to impress their families and those who have a condition that is a possible burden to his family feels ashamed. That is why most of the participants offered or requested not to answer the question and of those who answered it, only two showed enthusiasm and positivity after having the disease. According to Abel et al (2021), after receiving a diagnosis of hypertension, or high BP, people, especially in the black or people of color community, frequently experience shame or embarrassment. This could be for several reasons, such as feelings of guilt or blame for being sick, worries about the stigma attached to having a chronic illness, or worries about the possible repercussions of uncontrolled hypertension (Abel et al, 2021)

Theme 6: Nonmedical Remedies' Effects on Adherence to Prescribed Medication

There are people who believe in other remedies other than the prescription ones. As such, the researcher inquired on whether the participants believe that the use of herbs and other home remedies can be more effective than medication prescribed by your doctor. Halcom said, "Yes, my family know they are like it has been in the family the rest 10. My siblings got it too."

FB agreed with Halcolm by agreeing that traditional medication is effective while PP1, HG and Joyeau said that traditional medicines were not effective. Most of the respondents did not answer the question. Only three said that it was not effective. This indicates that traditional belief has a tremendous effect on adherence to medication. According to Shahin et al (2019), Traditional values and cultural norms frequently impact how closely someone follows hypertension control guidelines. For instance, based on their cultural or traditional views, some people can think that foods or activities are either good for their health or bad for it. A person's desire to adhere to a specified treatment plan for hypertension, such as taking medicine as prescribed or adopting lifestyle modifications, may be impacted by these beliefs. Healthcare professionals must be aware of these views to collaborate with patients to develop a treatment strategy that is both agreeable and efficient while also considering the patient's cultural and traditional values. Consequently, this may entail figuring out how to include folk cures or practices in the treatment plan or explaining the scientific rationale behind certain suggestion and educating the patient on the significance of adhering to the recommended course of action (Shahin et al, 2019)

The socioeconomic influences were to be addressed by answering RQ3. The researcher used various questions to address the RQ including asking whether affordability hindered the participants from taking the prescriptions. While LM and JC Declined to answer, the remaining participants said that they could afford the medications; some even accessed them for free. Halcolm said that if he stops taking the

medication, it's because he feels like not taking it and not because he cannot afford it. It is worth noting that according to New York State, (2022), there are several programs in New York that provide free or low-cost medications for people with hypertension including The Medicaid program which is a government-funded program that provides free or low-cost healthcare for low-income individuals and families; The Family Health Plus, available to low-income adults who are not eligible for Medicaid and do not have employer-sponsored health insurance; The Essential Plan: a health insurance program available to low-income individuals and families who do not qualify for Medicaid. It offers free or low-cost health coverage, including medications, to eligible individuals.

Theme 7: Health Insurance and Nonadherence

While these programs exist, there are requirements and eligibility criteria. As such, it is important to have insurance and coverage. The researcher asked the participants whether they had any insurance. YC, LM and JC declined to give a response on the question, PP1 did not have any health insurance while the rest, 10/13 representing 77% of the respondents had insurance cover. According to Ghimire et al (2022), Insurance coverage is crucial for the management of hypertension since it can assist in defraying the expenses of prescription drugs, doctor visits, and other therapeutic procedures. Hypertension is a chronic condition that needs constant medical attention to avoid significant health issues like heart attack, stroke, and kidney disease. These treatments can be costly and not available to everyone without insurance coverage (Ghimire et al 2022). Access to preventative treatment, like routine check-ups and screenings, which are crucial for diagnosing and managing the condition early on, can

also be made possible with the support of insurance coverage. This can enhance overall health outcomes and aid in preventing significant health issues. Without insurance, people hypertension management can be difficult, leading to nonadherence to medication protocols as recommended (Ghimire et al 2022)

Theme 8: Accessibility to Healthcare Providers

Hypertension is a very serious disease that can have many underlying effects and can contribute to the development of other conditions if not checked regularly. As such, easy access to healthcare is paramount. The researcher sought from the participants whether they had easy access to their healthcare provider if they need a prescription renewal, and whether they have easy access to the pharmacy to refill their hypertension medication. Three participants LM, YC and JC declined to give a response, 5 participants (39%) had easy access to their healthcare providers who they could call easily to get renewal of their prescriptions. Four participants (31%) felt that they had no access to healthcare and if there was any that is easily accessible, reaching the prescribing physical was practically difficult as most of the time they were received by receptionists who couldn't help. One participant Joyeau answered that he never really had to contact the healthcare provider. This shows that there is limited efficiency in the accessibility of healthcare for the male African American hypertension patients since only 39% can access them efficiently as revealed by the results. This can hinder adherence to hypertension medications. According to Nyaaba et al (2020), the lack of access to healthcare providers might make it more difficult to follow a hypertension treatment plan in several ways. Among them, the absence of routine follow-up appointments without

which it would be challenging for people with hypertension to get the appropriate monitoring and treatment plan modifications. Uncontrolled BP and a higher risk of consequences like a heart attack or stroke can result from this. Furthermore, accessing prescriptions might be challenging for people with hypertension if they can't access healthcare providers, which increases the likelihood that they won't be able to get their recommended medications (Nyaaba et al, 2020). Missed doses and reduced therapeutic effectiveness may result from this. In general, it can be very difficult to follow a hypertension treatment plan and raise the risk of complications if you can't go to a doctor.

Theme 9: Awareness of Community Resource Availability

Hypertension patients must access necessary resources and community-based resources are a crucial component of the management of illness. The researcher asked whether there was access to community resources and whether these resources had any significant effect on the adherence to hypertension medication. AF, TRW P, Halcom, PP1, Joyeau, FG, FB and PP are not aware of any within his neighborhood, YC, JC, PP11 and LM did not respond, HG is aware of the existence of community resources but has never had to use them. Community resources can help hypertension patients lessen the burden through support, financial assistance, counselling, etc. From the results of the study, it's only one person, HG, who is aware of the community resource center availability, and he also does not use it. This shows a worrying lack of sensitization on the se community resources. Without such resource structures, adherence to medication can be difficult since the burden solely falls on the shoulder of the patient.

Theme 10: Socioeconomic Status and Adherence to Hypertension Medication

Several factors, including socioeconomic status (SES), can influence adherence to hypertension medication: People from lower socioeconomic status could have less access to healthcare and struggle to pay for prescription drugs or doctor visits (Lee et al, 2019). They might also be less aware of the significance of following a doctor's orders when taking medication and the possible negative effects of doing otherwise. Additionally, those with lower SES may experience greater stress and have less social support, which can make it harder for them to manage their health and follow prescription schedules (Lee et al, 2019). There is evidence that those from lower socioeconomic backgrounds may encounter more obstacles to adherence, such as poor health literacy, a lack of access to transportation, and trouble managing many medications (Lee et al, 2019) With regards to the question participants AF, Joyeau, and FB responded that socioeconomic status did not affect their adherence to hypertension medication. TRW P, and FG said that socioeconomic status affected their adherence to medication. PP1 also agreed that it is money first before anything else. HG agreed and said, "Yes, if you broke, you do not get good medicine, cheap generic medicine. If you have money, you get better care."

YC and Halcom said that they have decent source of income but did not specify how their adherence to medication was affected by their socioeconomic economic standing, LM, JC, PP, and PP11 did not answer the question. From the results it is apparent that the majority of the respondents would have money first as a priority before anything else. Of the fourteen respondents, 6/14, which is 46% said that factors such as the type of job, salary, etc., affected their adherence to hypertension medication. 4/13 or

31% declined to answer while only three or 23% confirmed that their commitment to hypertension medication was in no way affected by socio economic factors. Similarly, when asked how socioeconomic factors motivate them to take their hypertension medication, the majority declined to answer with only PP1 saying always. This shows that socioeconomic factors have a significant effect on how African American Male perception of how they take hypertension medication. Some like Halcolm who says that he has a decent job would not be fizzed about it but others like YC would only be motivated if the socioeconomic status is a money-making business.

Theme 11: Influence Personal Beliefs/Perceptions on Adherence to Hypertension Medication

Beliefs on Hypertension Medications Amongst the African American Males

When asked whether they believe on the efficacy of hypertension medicine, three respondents PP11, LM and AF declined to answer. Four participants Halcolm, Joyeau, HG and PP believe that they work with varied degrees of success and preconditions. This represents 31% of the sample analyzed. Six (6) participants or 46% of the sample do not believe that hypertension medicine can work. This is unbelievably bad for the efforts to manage the condition since there is no trust in the proposed solution. Similarly, the researcher asked the participants what they expected to happen to their bodies if they took the hypertension medication. Four participants PP11, JC LM and AF declined to answer. TWR P said that the medications put his pressure under control, the same sentiments that are shared by Halcolm who says that the body is supposed to heal after the medications, Joyeau said that the body needs to familiarize itself with the medication first before it's

effects can be felt, FG, FB and PP expect the BP to go down. Three participants expected the medications to adversely affect the body.

Feelings When Faced with the Possibility of Taking Hypertension Medications

The researcher asked the participants about their feelings when they were faced with hypertension medication. AF, TRW P, PP1, Joyeau, JC, LM, PP11 and PP Declined to answer. YC believed that he felt a toxic load, which is a consequence of his consumption, Halcolm felt that a sense of disappointment because he was precautionous but still got hypertension. The majority felt disappointed with their habits, and some had to stop to reduce the incidences of hypertension. When asked on any challenge encountered after being diagnosed with hypertension, only four participants: Halcolm, HG, FB, and PP responded and apart from Halcolm who said that he was always tired, the rest reported no problem. When asked how the diagnosis affected them personally, most of the respondents declined to answer, with only four participants: Halcolm, PP1, FB, and PP responding. Out of the four respondents, three said that they were not affected personally by the diagnosis. It is only FB who said, “I change my lifestyle. I cut down on the salt in my diet I started to exercise, and my blood pressure came down.”

Perception of Alternative Medication

The researcher sought personal belief on how hypertension can be dealt with. AF, YC, LM, PP11, FG, HG and FB did not respond to the question, TRW P believed in herbal medicine as alternative to contemporary medicines, Halcolm also said believed that herbs, eating better, exercising more no alcohol use would be a good hypertension management strategy. PP1 also proposed herbal medicines, JC did not know any options

that can be used to manage hypertension, PP preferred to deal with it by not taking control and being apathetic. The fact that the majority of the respondents, 7 of the 13 did not answer, shows that they have their own belief that they would not reveal as they are also against hypertension medication. The majority of those who responded (4/6) believed that herbal medicine with cautionary measures like exercise and a healthy diet is the effective approach. The results confirm Pettey et al. (2016) findings that African American males trust traditional medical options in treating a majority of their illnesses. This adversely affects adherence to contemporary hypertension medication.

It is important for the patient and the physical to work together to manage hypertension. As such, the researcher sought to answer the question on what the participants did to ensure that they contribute to the hypertension prescription. TRWP said that he adheres to the medication and has a significant lifestyle change. Halcolm said, “Check the adverse reaction, if it causes drowsiness because I drive. I take it at night.”

PP1 on his part takes purge and herbs as treatment option, Joyeau takes an exercise, while it is not clear, JC said that he takes it every first thing in the morning. He has not embraced hypertension medicines. PP on his part advocated for lifestyle changes. Seven of the thirteen respondents declined to answer the question.

When asked whether personal hypertension management options like the use of herbs is more effective than the prescribed doctor, majority of the respondents including who answered (7/14) said that herbal medicines are more effective. For instance, Halcolm said, “Yes -because I have seen and heard people that go that route fare better “

There was no participant who said that alternative treatment options are bad. Six of the thirteen declined to answer. This affirms Pettey et al (2016) investigation on the preference amongst the Black community for traditional treatment options.

When asked about their feelings on taking hypertension prescriptions daily, the majority of the participants expressed their disgust and hatred with prescribed medication, due to beliefs that prescription medications for hypertension do not work. Due to several ingrained cultural norms and personal beliefs, African Americans may be less inclined to take their hypertension medications as prescribed. According to Pettey et al (2016), African Americans are less likely to trust Western medicine and more likely to think that hypertension medications are not necessary and are likely to think that hypertension could be treated with prayer or natural treatment (Pettey et al, 2016).

Summary

This chapter provided a detailed explanation of the procedure used to examine the transcripts from the fifteen semi-structured interviews to identify patterns and themes. To find trends, a systematic approach was employed to categorize the data into themes and other groups of common topics. This study presented three purposes: (a) to explore why African American males who experience early-onset hypertension fail to adhere to hypertension therapy; (b) to examine the roles that intrapersonal factors, such as perceived risk and personal beliefs, and interpersonal factors, such as social support and social networks, as well as community and institutions, such as healthcare, have in influencing medication adherence decisions; and (c) to contribute to the understanding of why African Americans diagnosed with early-onset hypertension fail to remain adherent

to prescribed medication therapies. In chapter four, I discussed the study investigated an under-researched area and has significant public health merit, given the high rates of morbidity and mortality experienced by African American males from hypertension (Ortega et al., 2015). I described in the table the data collection and data analysis process, and shared the varying experiences of the individual participants, how their unique experiences contributed richly to the outcome of this study, as well as how it might contribute social change in management of hypertension in African American males with early onset hypertension. In chapter 5, I discussed in detail the results and share any recommendation for that may be beneficial towards this share or need for future study.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

African Americans represent about 13.4% of the U.S. total population of 325.7 million, but they also represent 55% of individuals with hypertension (CDC, 2019, 2020), which makes African Americans among the highest ethnic group with hypertension in the world. Furthermore, hypertension continues to increase disproportionately among ethnic minority groups, such as African Americans. African Americans also tend to develop severe hypertension earlier in life (AHA 2022; Villines, 2021). Moreover, Waldron et al. (2019) observed that African Americans suffer a higher incidence of hypertensive emergency, and their prevalence is five times higher than the national average. Along those same line, the AHA (2022a) noted that over 40% of African American males develop hypertension in early life. AHA (2022b) further asserted that blood vessel stiffness, even in young, healthy African American males, contributes to higher central BP in the body. Historically, the chasm in hypertension and hypertension-associated outcomes has shown that African Americans are at a greater disadvantage, resulting in negative health outcomes (Funk, 2022). African Americans have the highest rate of hypertension in the United States, at a rate of 450 per 1,000, and have been found to have the lowest hypertension medication adherence (Pettey et al., 2016; Xie et al 2019).

In this phenomenological study, I (a) explored why African American males with early onset hypertension failed to adhere to hypertension therapy; (b) examined the roles intrapersonal factors, such as perceived risk and personal beliefs, interpersonal factors, such as social support and social networks, and community and institutions, such as

healthcare, have in influencing medication adherence decisions; and (c) investigated why African American diagnosed with early-onset hypertension failed to remain adherent to prescribed medication therapies.

The HBM and the SEM provided the framework to guide the understanding of adherence perception in African Americans with early onset hypertension. The theoretical framework supported the wider inquiry of this research as I examined the intrapersonal factors, such as the perceived risk and personal beliefs, and interpersonal factors, such as social support and social network. These factors contributed greatly to my understanding of the individual perceptions of the research participation on their lived experiences, which contributed to their perception of hypertension medication adherence. I focused on African American males between the ages of 18 to 45 whose lived experiences consisted of living with new diagnosis of early onset hypertension, also having had the challenge of adapting to lifestyle change, including diet modification, and challenging their cultural beliefs of how to treat a chronic disease like hypertension with prescription medications.

Due to the limited data on adherence perception, there was a justifiable need for research on the phenomenon to bridge this gap that existed. I interviewed 14 participants who were African American males between the ages of 18 and 45. These were African Americans males who experienced early onset hypertension and were given prescribed hypertensive medication for management. The RQs guided the interview for the study, and the participants answered the questions posed by the study team. Each participant

brought a unique perspective to the study, providing valuable insight as they shared their lived experiences and perceptions.

The views of these African American males were based on their own individual perception of hypertension medication adherence or their belief that they were not susceptible to adverse hypertension event. There were 10 themes that emerged. The following themes were generated because of expressed views:

- knowledge of the hypertension
- interpersonal relationship and adherence to hypertension medication
- community resources and adherence
- motivation and adherence to hypertension medication
- nonmedical remedies' effects on adherence to prescribed medications.
- perception of the condition and adherence to medication
- health insurance and nonadherence
- accessibility to healthcare providers
- socioeconomic status and adherence to hypertension medication
- feelings when faced with the possibility of taking hypertension medication.

The data retrieved from insights given by interviewee showed that more research is needed on the impact of cultural norms in the treatment of chronic disease such early onset hypertension in African American males. Table 2 shows the qualitative findings and the participants' actual responses.

Table 2*Qualitative Findings: Participants' Actual Responses*

Participants	RQ1	RQ2	RQ3	RQ4
1	Declined to answer	Declined to answer	3a. No, I have not. 3b. Yes, I have health insurance. 3c. No every time I call, I get the receptionist, and told I have to be scheduled to call. 3d. I do not know of any community resources in my neighborhood. 3e. No	4h. It is possible for herbs to be effective for high blood pressure. 4I. I do not take the medications. 4j. Our bodies were made to heal itself
2	1.No I am a nurse 1b. very confident 1c.it is good. 1d. No, I am a nurse. 1.two times a day	2.a yes, I have some serious chronic fatigue. 2b.my pressure is high. 2c. I needed to 2d.it sucks. 2e. yes lots of vegetables and exercise	3a. No, I have never. 3b. Yes, I have health insurance. 3.c. Yes, I have access to my provider. 3.d No I do not know of any community resources that are available to help.	4a. No 4b. pressure under control 4f Herbal medications 4 g Lifestyle change, adhere to medication.

Participants	RQ1	RQ2	RQ3	RQ4
		2f. No, it did not affect my relationship.	3e.yes green leafy vegetables	
		2h. lifestyle change diet, fiber, no problem	3f. No answer	
3.	1a. No b. I do not believe in medication. I have a naturopathic doctor. 1c.not good 1.d no 1e. I do not take it; I am a biochemist.	2a. BP has to be measure at 3 different times a day, 1b. I do not know. 1c no response 1d, no response 1e. High blood pressure is not a disease. 1f. Exercise and diet help control your pressure	3a. No 3b No response 3c. no response 3e, yes if you have money, you will be able to buy what you want. 3f. it is a money-making business	4a. Not good 4b destroy your liver. 4c. toxic load. A result of what you consume
4	1a. Once in a while 1b.8/10, pretty confident 1c. I think it is good. Most people I know would rather take natural herbs.	2a.I do not see it affecting me anyway because I react normally. 2b. No, I do not know if there are any. I do not	3a.No. If I stop it is because I do not feel like taking it 3b. Yes. lower percentage and then it depends on what medication. 3c. yes	4.a. It is good for some people, but I think the best way is by natural herbs. 4b. The body is supposed to heal itself. 4c.I was like WOW how did this come about? I

Participants	RQ1	RQ2	RQ3	RQ4
	1d.I do not often, but when I do I ask someone in the medical field. e. As required, but right now what I am taking is finished. (What makes you have to?) Example if I have to take a CDL test.	know about it. 2c. I have high blood pressure and I take medication for it. 2d. Yes, I feel encouraged to do it because I want to get rid of it. 2e. I do not feel good about it. I don't want anybody to know I got it. 2f. For the most part I exercise and eat lots of vegetable and fruits 2g. When I go to certain gatherings there is macaroni pie and rice I eat and keep it to a limit (Have you changed	3d. I do not know. 3e. I do not have a stressful job. 3f. I consider myself having a good job. Declined to answer.	am exercising, trying to eat right, but realized that it is in the family. 4d. Yes, sometimes I find myself getting tired. 4e. Not really 4f. herbs, eating better exercising more no alcohol use. 4g. Check the adverse reaction, if it causes drowsiness, because I drive. I take it at night. 4h.yes -because I have seen and heard people that go that route far better. 4h. Not good 4i. I don't like it. I think doctors, but they don't advise you to see herbalist because they will go out of business if they tell people to go to the herbalist.

Participants	RQ1	RQ2	RQ3	RQ4
		your diet? - Yes and no I will change it then not for long) 2h. Yes, my family knows they are like it's something that has been in the family. My siblings got it too		10.I would advise anyone to take their medications as prescribed but at the same time try to see an herbalist, exercise, and eat better.
5	1a. Never 1b. very confident 1c. not good. It is a scheme to get money. 1d. never I.e., do not take it, I take natural herbs	2a. It did not affect me. 2b. If they have, I don't know. 2c.I have high blood pressure. 2d.yes 2e no answer 2f. It is a good thing. 2g. it did not 2h, none	3a. No 3b. No 3C. No, I am a pharmacist. 3D. If there is any I do not know 3e. of cause it's all about money. 3f. Always	4a It is not a cure. 4b. It has more bad side effects than the high blood pressure we are treating. 4d. none 4E. It did not 4F.use herbs and medications. 4g. I took a purge, I use herbs. 4h. yes 4 i. I do not take it medication do not cure high blood pressure. 4j. I do not trust them. 4k it is all about money, when you take medication

Participants	RQ1	RQ2	RQ3	RQ4
				for high blood pressure it goes to the stomach, and it is change in the stomach
6	<p>1a. yes, not often</p> <p>1.bWanted to know what it does what is and what is the side effects</p> <p>1c. I think to control, I do not think it is a cure, that's my concern</p> <p>1d.it is for one think then then it affects other organs.</p> <p>1e. three times a day</p>	<p>2a. I do not think so, when they told me I refused the diagnosis.</p> <p>2bNo, I was not aware that I did my own work on it alone.</p> <p>2c I talk about it with my friends.</p> <p>2d. yes. It opened my eyes.</p> <p>2e. You have to make a change.</p> <p>2f. Yes, I felt shame.</p> <p>2g. It did not</p> <p>2h. No, it did not</p>	<p>3. You go to the doctor, then he will diagnose you, he will give me medication. I said to him that the thought of going to the hospital gave me nervousness.</p> <p>The first time my blood pressure135/84 he wanted me to take medication.</p> <p>3a. NO</p> <p>3b. YES</p> <p>3c.I never really had to</p> <p>3d. If they have, I do not know.</p> <p>3e.no</p> <p>3.f none</p>	<p>4b.I think once I get in the habit of taking it, my body gets accustomed.</p> <p>4g. juice I do a little exercise.</p> <p>4h. my problem is if you are giving me medications to control my pressure do, I still have to exercise, I still have to always try to avoid, still stay my diet</p>
7	<p>1A. Never</p> <p>1b Very</p> <p>1c. It is bad.</p>	<p>2a. Not applicable</p>	<p>Declined to answer</p>	<p>4f. I do not know.</p>

Participants	RQ1	RQ2	RQ3	RQ4
	1d. Not applicable 1e. Everyday	2b. yes CVS has a blood pressure machine available. 2c, cook with less salt. 2d. yes 2e.I hate it. 2f. I just cook with less salt. 2g. compromise		4g. I take first thing in the morning. 4h. yes 4i I hate it. 4j pills do not treat the problem.
8	1A. No 1b. 100% 1c. it is helpful But I rather herbal stuff. 1d. Never 1e. Everyday	2A. No, it runs in my family. 2b. No 2c. I went to the doctor for a checkup, and he gave me medication. 2d.I agree. 2e.I feel terrible about it. My family Is supportive	Declined to answer	Declined to answer
9	1.No 1.I would not take it. 1c.I do not want to be	2a. Shock. I say What? I? That is why I am careful	3a. No 3b. yes, I get the receptionist	

Participants	RQ1	RQ2	RQ3	RQ4
	dependent on it. 1d.no 1e.I do not want to take it	with what I eat. 2B. No, I do not know. 2c. Stay away from salty food. Me, I cook my food and drink lots of water. 2d. I like it. 2e. It is all about what we eat, not about stress, eat right, try to be less stressed. 2f. Finding new habits because whatever you are doing is not working.		
10	1a. No 1b. Very confident 1c. It leads to taking other medications. You take for one thing then you need other medications.	2a. It did not. I felt slow and sluggish. 2b. Hospital 2c. Exercise and eat right. 2d. Yes, I felt good. 2e. slow down on	3a. no 3b. Yes, I have health plus. 3c. It was easy, I could have call anytime. 3d. Yes, but I never have to use it.	4a. It works if you work it, meaning if you belief that it will work when you take it. 4b.I felt old, it affected my drive. 4c I had to stop smoking it was no good

Participants	RQ1	RQ2	RQ3	RQ4
	1d. never 1e. once a day	medicine and see what works for you. 2f. It is a better life. 2g. It an asset 2h. No way	3e. Yes, if you broke, you do not get good medicine, cheap generic medicine. It you have money you get better care	
11	1a. No 1b. Yes, I feel confident. 1c. I do not like to take medications. But it works. 1d. I do not have problems understanding. 1e. Once a day	2a. No, it did not. 2b. Not aware 2c. I have high blood pressure. 2d.yes 2e. I feel bad. I don't want it. 2f. I have not really changed anything right now. 2h. Yes, say nothing.	3a. No, I get my medication free. 3b. Yes, I have insurance. 3c.yes just call the office. 3d. No 3e. It makes a difference if you have more money	4a. I do not like taking them. 4b.I expect it to take my pressure down. 4c. It did not feel good.
12	1a. Never 1.b Confident, but I would not take the medications, I do not like medications.	2a, None 2b. I do not know if there is any. 2c. You get high blood pressure when you	3a. No 3b. I have insurance. 3c.yes 3d. No, I am not sure.	4a.I do not like medications 4b. for blood pressure to be improved. 4c. No, I was told I had too much sodium in my

Participants	RQ1	RQ2	RQ3	RQ4
	1c. I do not like to take medications. 1.d. I do not have problems understanding medical information. daily	have too much sodium intake. 2d, Yes 2f. Feels good, I actually like it. It did not affect me.	3e. No, I think it is all about lifestyle. I think so in certain ways diet, intensity of job.	blood, I had prehypertension. 4D. none 4e. I changed my lifestyle. I cut down on the salt in my diet I started to exercise, and my blood pressure came down
13	1a. Never 1b. Very confident because you want to live. 1c. It is a good emergency thing. . Good for 30days After 30days we should get off and detox. 1d. I have no problems. I took it for a week.	2a. It did not 2b. No if they have, I do not know. 1d. I did it on my own 2h. They say we know because I was big and fat. I used to smoke and was told it create a phantom effect.	3a. No 3b. Yes, I have health insurance. 3c. No 3D I do not know.	4a. They are good for emergencies. 4. B To make my blood pressure go down 4C. No Answer 4d. I did not face any problem. 4e no answer 4F. They deal with it by not taking control, they become apathetic. 4g. Lifestyle change and nothing else. 4h. Yes, they make your pressure go down.
14.	1a. Never 1b. Confident but will not take it. 1c. I do not like to take medications. 1d. I do not 1e. Daily	2a. declined to answer. 2b. I do not know if there is any. 2.c. It is when you	3a. No 3b. I have insurance. 3c. I have access to him. 3d. No, I am not sure. 3e. I think so in certain ways,	4a. No, I do not like medication. 4b. For blood pressure to improve. 4c. No, I was too that too much

Participants	RQ1	RQ2	RQ3	RQ4
		<p>have too much sodium intake.</p> <p>2d. yes</p> <p>2e. Declined to answer.</p> <p>2f. I feel good. I actually liked it; it did not affect me.</p>	<p>diet, intensity of the job.</p> <p>3f. No, I think it's all about lifestyle.</p>	<p>sodium. I was angry.</p> <p>4d. I did not face any problem.</p> <p>None.</p> <p>4e. I change my lifestyle</p>

Note. Participants' answers to research questions that were broken down into themes.

Table 3*Themes and Participants' Responses to Questions*

Themes and participant responses	Number of participants	%
Theme 1: Knowledge of hypertension prescription		
Reported took medications but with varying frequencies	10/14	71.4
Did not take their medication	4/14	28.6
Theme 2: Interpersonal relationships and adherence to hypertension medication		
Experience initial adverse effects from medication interfering interaction with family and friends	5/14	35.7
Relationships with family and friends were not affected by medication	9/14	64.3
Theme 3: Community resources and adherence		
Community resources provided resources to support motivation and accountability for taking medications	10/14	72
Was not aware of community resources.	4/14	28
Theme 4: Motivation and adherence to hypertension medication		
Positive effects of lifestyle change (diet exercise)	11/14	77
"It sucks"	3/14	23
Theme 5: Perception of condition		
Feeling of shame, hatred of disease, indifference. Not likely to take the medication.	12/14	85

Themes and participant responses	Number of participants	%
Embraced diagnosis and had positive outlook	2/14	15
Theme 6: Nonmedical remedies' effect on adherence to prescribed medications.		
Believed traditional medications to be effective	2/14	15
Did not believe medication to be effective	3/14	21
Declined to answer	9/14	64
Theme 7: Accessibility to health care providers		
Got medications from free clinics (State sponsored)	10/14	70
Had easy access to primary care provider	5/14	36
Did not have access to primary care provider	4/14	28.5
Never had a need to call provider	1/14	7
Declined to answer	4/14	28.5
Theme 8: Awareness of community resource availability.		
Know how to access community resources	1/14	7
Did not know, how to access community resources	13/14	93
Theme 9: Socioeconomic status and adherence to hypertension medication		
Economic status affects medication adherence	7/14	50
Economic status did not affect their medication adherence	2/14	15
Declined to answer	4/14	31
Job, salary affect medication adherence	6/14	46

Themes and participant responses	Number of participants	%
Commitment to hypertension medication not affected by socioeconomic status	3/14	23
Theme: 10: Influence of personal belief /perception on adherence to hypertension medications		
Declined to answer	7	53
Did not believe in contemporary	4	31
Did not know of any alternatives	2	16

Note. The above table is a sample of participants responses to questions. These responses were formulated into teams.

Interpretation of the Findings

Theme 1: Knowledge of Hypertension Prescription

Theme **I**: Knowledge of Hypertension Prescription emerged from RQ1: How does health literacy influence adherence to hypertension medications among African American males? This question focused on hypertension medication awareness and knowledge of the hypertension medications. The response assisted me, as the researcher, in understanding how health literacy affects adherence to hypertension medication amongst the African American male population in Brooklyn, New York. The responses showed that while the participants have their own individual beliefs regarding the medications, most participants (10/14) or 71.4% took medications but with varying frequencies. The research findings also demonstrated the existence of medication misuse among the participants. Only five of the 14 (35.7%) participants did not take their medications.

The information obtained gave insight on how the varied beliefs of participants in the study hinder full comprehension of hypertension medications, and how it affected the rates of adherence to the requirement of hypertension medication. Muvuka et al., (2020) also found inadequate health literacy among African Americans. Low health literacy is a barrier to effective care (Muvuka et al., 2020). Health care providers for so long demonstrated an inability to appreciate extent of the inadequate health literacy level among African American males, and the findings of this research such that failure of health care providers has contributed to the African American male not being able to follow through with recommended prescription guidelines and nonadherence to prescribe medical regimen like hypertension medications.

Theme 2: Interpersonal Relationships and Adherence to Hypertension Medication

Theme 2: Interpersonal relationships and adherence to hypertension medication was derived from RQ2: How do interactions with family, friends, and the workplace, influence adherence to hypertension medications among African American males? This question sought to explore how interactions with family, friends, and the workplace influenced adherence to hypertension medications among African American males with early onset hypertension. Pan et al., (2021) after conducting a research study on the effects of social support on treatment adherence in hypertension, concluded that there was a positive strong correlation with social supports and hypertension medication adherence. In this study, I, the researcher, noted that the participants verbalized extreme value of their social supports, for example, they were able to cope with their hypertension diagnosis better because of the support of family and close and intimate friends. In this

research study it was observed that five out of 14 (35.7%) participants expressed how, in varying degrees, they experienced initial adverse effects from taking hypertension medications, which affected their overall wellbeing, and impacted their daily interactions with close friends and family members. Adverse effects included fatigue or other health related concerns. The significance of these findings to the study is that it also supported that interpersonal connection was seen by participants to be important in facilitating adherence to prescribed medical regimen. However, as the researcher, I must add that I observed that these participants were not immune to inappropriate advice from family and friends also who unintentionally shared negative advice regarding adherence. Pan et al., (2019) noted that well intended advice from family friends was noted to adversely affect adherence in their research participants. Other examples of negative impact were shared by some participants who expressed that the responsibility of having to take BP measurements three times a day required family assistance which was also considered a negative effect of hypertension and the medications required to control the condition.

One (7.1%) participant expressed experiencing shock after initially receiving the hypertension diagnosis. He was careful about what he ate, so the diagnosis was unexpected. The remaining nine participants, which represented 64.3% of the sample, stated that their relationships with family members and close friends were not negatively impacted. This demonstrated credence as to how interpersonal and intrapersonal relationships are important and the ability of friends and family to support each other with understanding. Bussell et al., (2017) noted that health care professionals need to discuss adherence with their patients and provide encouragement by creating a blame free

environment that gives patients opportunity to speak about their medication taking behavior.

Theme 3: Community Resources and Adherence

The premise of this theme is to understand how African American males utilized the available resources in the community to enhance their adherence to hypertension medications. Shiyanbola et al (2018), noted that improvement in adherence to hypertension medication among African Americans with the utilization of community resources such as advocacy groups who gave likeminded support have the ability to emphasize the availability community resources and services which include peer group support, motivation, and accountability for taking medication as prescribed by the community health clinic or centers which often are either free or low cost to enable hypertensive patients to get medicine and/or other resources. Shiyanbola et al (2018) also noted that individuals with health care needs can also obtain responses to their inquiry regarding the drug, get assistance regarding adverse drug effects, and get recommendations to assist adherence in prescribed medication. Advocacy groups often join forces with health care professionals, knowing that it is critical to establish a strong working connection with a medical professional to gain continued assistance in management of hypertension. To ensure that patients take their medication as prescribed, healthcare professionals need to collaborate with their patients to develop a plan that emphasizes the importance of adhering to medication instructions Heath (2019); Marden (2019). With the rise of technology and globalization, there are now numerous apps and other technological resources available to help patients keep track of their medication.

However, many patients are unaware of or do not see the value in using community resources to support their hypertension medication adherence (Golubinski et al., 2020).

My dissertation study found that the utilization of community resources such as advocacy groups and community health clinics was associated with improved adherence to hypertension medication among African American males. Seventy-two percent of respondents indicated that community resources provided support, motivation, and accountability for taking medication as prescribed, as well as assistance with adverse drug effects and recommendations to assist with medication adherence. The study also highlighted the importance of collaboration between healthcare professionals and their patients in developing a plan to emphasize the importance of adhering to medication instructions. Overall, the study supports the notion that community resources play a significant role in enhancing adherence to hypertension medication among African American males.

Theme 4: Motivation and Adherence to Hypertension Medication

Motivation and adherence can be incredibly challenging, Konstantinou et al (2020). RQ2 focused on participants interactions with others and the environment and sought to explore how influential were this interaction in promoting hypertension medication adherence, researching the association between motivation and adherence was an alternative approach to asking RQ2. Taking medication as prescribed by the healthcare provider prevents health complications and leads to improvement in general health. Despite these advantages that can be gained from medication adherence, there are numerous reasons why an individual might find it difficult to follow medical prescription

as prescribed. Some of these reasons included forgetting to take the medication, the negative effects of the medication, the cost of the medication, and values or beliefs. Konstantinou et al., (2020) assert that chronic diseases like hypertension can be incredibly challenging for an individual with early-onset hypertension. Complicating this responsibility of having to take medication like hypertension medication daily is the interplay of cultural and personal beliefs s values and perceptions. Tan et al., (2019) sum up these challenges as crucial factors pertaining to lifestyle changes. According to Tan et al., (2019) lifestyle modification might be that one critical component is needed for timely adherence. Involving adjustment to an individual daily schedule, dietary preference, or level of physical exercise.

In this dissertation research study, some participants expressed that lifestyle change was a revelation and very encouraging because they were able to see the positive effect it had on their health. While others thought that “it sucks.” Others shared that they did not experience any motivation for adherence. Overall, 77% of the participants stated that they experienced enthusiasm because of lifestyle changes made and were willing to adhere to their hypertension medication regimen as prescribed. As a result of these findings, I agreed with Tan et al., (2019) who stated that lifestyle changes have a tremendous effect on medication adherence. Also agreeing with Tan et al., (2019) statement, Cary et al., (2018) concluded in his research which focused on prevention and control in hypertension management, the role of environment and social determinants. Some factors included were identified as overweight /obesity, diet, and exercise. It was observed that the participants who shared an understanding for the need of lifestyle

change in the management of their hypertension diagnosis were the ones who were enthusiastic and motivated to be adherent with their prescribed hypertension medication.

At that point, it was pre-climatic to conclude that the participants who were not motivated did not utterly understand and embraced their hypertension diagnosis. During this research study, there were multiple observations regarding the research participants that could have impacted their adherence ability, sociodemographic factors such as age, gender and socioeconomic status, low health literacy level, that is, participants' ability to understand the health information given regarding their diagnosis and recommended treatment, beliefs, participants belief on traditional medication is not as good or effective as herbal medication, and unintentional/ others these are the well-intended family and friends who support these participants with their diagnosis. Sharma and Agrawal (2017) who also agree that there are numerous factors that influence treatment adherence to hypertension education. Health professionals noted Sharma and Agrawal (2017), can motivate adherence practice by tailoring their message in a way that conveys an understanding of patient belief, preferences, and knowledge levels.

Theme 5: Perception of Condition and Adherence to Medication

This theme gave critical insight to RQ2 which asked, how does interaction with family, friends, and workplace influence adherence to hypertension medications among African American males? Frost et al., (2019) stated that it is reasonable for an individual who has been given a diagnosis of hypertension to feel overburdened or frightened. High BP is a chronic disease, which increases the individual vulnerability to critical health issues such as renal disease, heart attack and stroke (Frost et al., 2019). There were mixed

feelings among the research participants regarding their reactions when they received their hypertension diagnosis. The feelings ranged from indifference to shame, to hatred of the disease, to positivity and willingness to embrace change. Overall, each participant demonstrated that the assertion by Frost and colleagues (2019) regarding expectation of emotional response and the need for empathy was quite accurate. In terms of treatment approach positivity has been said to be the best approach. Two participants embraced that positive outlook, this represented 15% while the remaining 85% were not likely to adhere to medication, because of their outlook. This agreed with Shahin et al., (2019)'s study which found a positive correlation between having negative perception and nonadherence to prescribed medications.

Theme 6: Nonmedical Remedies' Effect on Adherence to Prescribed Medications

RQ1, and RQ 4 played a pivotal role in exploring personal belief and it was noted that from the responses obtained from participants, personal belief can be a barrier to positive health outcome. The participants shared their belief regarding the efficacy of other remedies other than prescription medications. It was noted that although culture played a significant role in the treatment approach in hypertension management especially among African American males, healthcare providers did not demonstrated awareness, also challenging to the ability to received care, was inadequate health literacy which was cloaked by the projection of cultural norms. Two out of fourteen participants verbalized their belief of traditional medication to be effective, while three out of fourteen stated that they did not believe that they were effective. The remaining nine declined to answer. These results confirm those by Shahin et al., (2019) who stated that

traditional values and cultural norms often influence medication adherence. It is imperative for healthcare provider in treating African American males with early onset hypertension to have the ability to appreciate cultural norms and to have the skills and knowledge to incorporate these valued traditions in their treatment plans.

Theme 7: Health Insurance and Nonadherence

Socioeconomic influences, a critical social determinant to medication adherence.

RQ3. How does socio-economic status influence African American males with early-onset hypertension ability to manage hypertension, focused on health insurance and non-adherence. Two out of fourteen declined to answer the question of medication affordability and how it impacted their adherence, the remaining 12 participants gave the assurance that they could either afford or they had free access to the needed hypertension medication. Overall, 77% of participants in this dissertation study had health insurance. According to the New York State Department of Health (2022), there are several programs whereby individuals can access free or low cost medications. Examples of such programs are the Medicaid program; this is a government funded program that provides free or low-cost health care for low-income individuals and families. The other one is Family Health Plus, which is available to low-income adults who are eligible for Medicaid and do not have employer sponsored health insurance New York State of Health (2021). The Essential Plan is available for individuals and families who do not qualify for Medicaid. Hypertension is a chronic disease that needs constant monitoring to prevent medical complications such as stroke, heart attack, and kidney disease. Ghimire

et al., (2022) noted that treatment for this chronic disease can be costly and not assessable without health insurance.

Theme 8: Accessibility to Healthcare Providers

Hypertension is a profoundly serious chronic disease that contributes to the development of other diseases if not managed appropriately. Thus, the ability of the hypertension patient to have access to the health care provider is of paramount importance in the management of hypertension. RQ 3. How does socioeconomic status influence African American males with early-onset hypertension perception of hypertension? Patients who have access to their healthcare providers have been reported to have positive health outcomes, improve self-management, and reduce the need for hospitalization (Maniri-Pescassio, 2023). It must be appreciated that socioeconomic status influences access to health care. From a historical perspective as far back in 2003, Becker and Newsom (2003) challenged public health providers to examine racial disparities in health care, namely access to care. Socioeconomic status up to the present day continues to be a barrier to access to healthcare, (Ohlson 2020; & Bailey 2022), were among multiple researchers that highlighted the impact of socioeconomic status on access to care. The participants in sharing whether they believed that they had access to their health care providers validated the research literature. Example, one of the studies focused on whether the participants had access to prescription renewal from their providers and the pharmacy for their hypertension medications. Over 70% of participants interviewed got their medication from free clinics in Brooklyn, New York.

The research participants had diverse experiences in terms of access. Three participants gave no response. Five responded that they had access to the way that they were able to call their providers easily to get their prescription renewals. Furthermore, four participants felt that they did not have easy access to their providers, whenever they called, they would get a receptionist who could not help. One participant reported that he never really had the need to call his provider. These results demonstrated that provider accessibility efficiency is limited for the African American males with early onset hypertension. This is evidenced by the 39% of participants who felt that they had easy access to their health care provider and out of the remaining 71%, 31 % did not have easy access, the remaining 40% either did not feel a need to access their provider or declined to answer the question. Nyaaba et al., (2020) stated that a lack of access to healthcare providers makes it more difficult to adhere to medical regimen in the managing of hypertension, leads to a lack of follow through with medical appointments, and no monitoring of the disease process, leading to increase in morbidity and mortality in hypertension. The participants of this study may have the same experiences as those in the study by Nyaaba and colleagues (2020) based on their responses regarding access to healthcare.

Theme 9: Awareness of Community Resources Availability

At a community level, individuals with a chronic disease like hypertension need to know where to where to locate community-based resources. RQ 2 focused on interpersonal and intrapersonal influences on adherence. This RQ also provoked further thought on the relevance of community resources in support of medication adherence.

The findings support the literature, which stated that the lack of awareness and inadequate use of community resources leads to diminished adherence to prescribed medication (CDC 2017). Included among the community resources are the local churches in the form of support groups, a team-based approach including local health centers and local pharmacies some of these resources may include basic health education and nutrition classes. Knowing how to access these resources can be effective in the lives of individuals with hypertension in how they approach their personal management of the disease. Out of the 14 participants interviewed, only one individual responded positively regarding knowing how to access community resources. Soltani et al., (2021) examined the effect of community resources and concluded that community-based intervention led to improvement of cardiovascular disease prevention, of note BP reduction also serum levels of LDL C, triglycerides, obesity indices and blood glucose. Community resources served to lessen the burden of the individual with hypertension (Carey et al 2018), providing avenues for networking, financial assistance, and counselling. The lack of awareness of the research participants regarding their knowledge of community resources is alarming, without knowledge of community resource structures, medication adherence becomes challengingly insular, with the individual patient burden solely.

Theme 10: Socioeconomic Status and Adherence to Hypertension Medication

This theme's foundation came from RQ 3, which sought to explore how socioeconomic status influences the management of early-onset hypertension in African American males' Socioeconomic status is among the many factors that can affect adherence to medication. Individuals with lower socioeconomic status could have less

access to health care and may struggle to pay for prescription drugs or doctors' visits (Lee et al, 2019). Six participants agreed that socioeconomic status affected their ability for adherence to hypertension medication. However, not all the participants stated that they were individually affected. Two participants reported that they had a decent source of income, four of the participants did not answer the questions. The overall results demonstrated that it was apparent most of the participants saw money as a priority. Forty-six percent of the participants reported that factors such as type of job salary, etcetera, affected their adherence to hypertension medication and 31% declined to answer. Only 23% reported that their commitment to hypertension medication was in no way affected by socioeconomic factors.

When asked how socioeconomic factors motivated them to take their medication, only one participant was forthright with his answer, the others declined to answer. This demonstrated that socioeconomic factor are critical drivers that assist in the thought process on African American male perception on how the take hypertension medication. The level of income can influence an individual's attitude towards the cost of acquiring medications Sharma and Agrawal (2017). While some people may not be concerned about the economics of purchasing medications because they have a steady income, others may only be motivated to adhere to their medications regimen if they see potential improvement in their socioeconomic status, like how a profitable business would operate. Thus, socioeconomic status, which includes but is not limited to, wealth, education, and employment influences access to adherence to medical regimen. As demonstrated in

discovery these factors play a crucial role in determining the level of adherence to hypertension medication.

Theme 11: Influence of Personal Belief /Perception on Adherence to Hypertension Medications

All participants brought to the table their own set of values and beliefs. In RQ 4, the question was asked regarding the influence of personal belief on adherence of hypertension medication among African American males. Wu et al., (2022), noted trust to be a significant criterion for adherence. This was supported by the data /collected which revealed glimpses of shared cultural beliefs. It was observed among the expressed individual opinions, that the component of trust played a particularly significant role in supporting adherence. The participants' responses on whether they believed in the efficacy of hypertension medication were very varied. However, the overall input demonstrated the need for education, it was also observed that to fill the knowledge gaps participants depended on cultural and personal beliefs fueled by perception formulated without facts or science to support understanding that can lead to adherence.

The researcher also observed that personal belief significantly impacted adherence. When asked if they thought that herbal medicine was an alternative to contemporary medication, 53% of the participants declined to answer or rather hinted that they did not want to share their belief on contemporary medication for hypertension, 31% verbalized affirmatively, adding caution as a caveat and 16% reported that they did not know of any options that could be used for hypertension. This result support Hostetter and Klein (2021)'s findings that African American males trust traditional options in

treating most of their illness. Beliefs and views like those expressed by the participants demonstrated how adherence to contemporary medication is adversely affected.

Additionally, participants shared that another demotivator for taking contemporary medications was the clinical adverse effect of the drug, stating that herbal medications were more effective and did not have the potential adverse effects like drowsiness, none of the participants verbalized those herbal medications were bad, with the majority of participants stating contemporary medication for hypertension over a period of time does not work, this also supported Pettey et al., (2016)'s findings that African American males do not trust Western medications and are more likely to believe that hypertension can be treated with prayer or natural medications.

Limitations of the Study

This study was restricted to African American males between the ages of 18-45. The sampling methodology was purposive, making the inclusion criteria specific to a particular racial ethnic group and age range. It would be beneficial if the restriction of age were removed and widened the sample population. Participants were recruited from one county in New State although it is viewed as the largest county it was one geographic area in the borough of Brooklyn in New York; this borough is outside my immediate environment hence the process took more time than originally planned.

Recommendations

There are several recommendations to consider because of this dissertation. One recommendation for future research on exploring and understanding the perception belief and experience of African American males with early onset hypertension is to gain a

better understanding of cultural diversity. It would also be beneficial to better understand the African American populations' willingness to educate themselves regarding the relationship between cultural traditions and hypertension disease management. Further, future studies should also focus on the socio-demographic impact of hypertension disease-related perceptions and treatment. Complementary to these recommendations, additional research is needed to how these experiences individually and collectively shape medication adherence. Future research should explore the experiences, perceptions, and beliefs of African American males without limiting adherence to early onset hypertension by expanding the age group.

Implications

The purpose of this qualitative research study was to explore why African American males who experienced early-onset hypertension failed to adhere to hypertension medication therapy. This study also examined the interpersonal and intrapersonal factors that influenced adherence. Lastly, this study explored factors that contributed to the understanding of why African Americans diagnosed with early-onset hypertension failed to remain adherent to prescribed hypertension medications. The study results have far-reaching implications for positive change not only among African American males with early-onset hypertension but for the overall African American male population with hypertension in general.

The study confirmed that African American males are not adherent to prescribed medication for hypertension and suggested that medication purpose and expected benefits should be explained simplistically at a 5th-grade level to promote adherence to all groups.

Although the reasons for non-adherence were multifactorial, and as supported by the literature review cultural influence was identified as a major driver, patient–provider communication significantly influenced adherence to hypertension medication. This study also unveiled those cultural beliefs, especially in the efficacy of herbal medication was recognized as a great influencer to non-adherence to western or traditional antihypertensive medication. Socioeconomic status continues to be underscored and factors health literacy and access to health care need further exploration. The phenomenological approach, I believe, was the best approach for this study, providing the researcher the opportunity to focus on the adherence experience of participants with an interview approach that provided in-depth questions for data extraction. As participants described and discussed their experiences with the researcher. The researcher was able to investigate, gain insight and understanding of the adherence perception of the research participants.

As recognized and discussed in this research article there are multiple factors that can influence adherence to prescribed medication. However, healthcare professionals must recognize that they too play an influential role. The health care professional who demonstrates empathy and creates a non-judgmental environment in his/her practice will facilitate open discussions on adherence behavior, this noted by Pan et al., (2021), leading to positive patient outcomes.

Conclusion

The study showed that African American males with early onset hypertension demonstrated inadequate understanding of hypertension medication instructions. The

purpose of this research was to guide the discovery and findings of this research. This study explored why African American males who experienced early onset hypertension failed to adhere to hypertension medication therapy. In this study the roles intrapersonal and interpersonal factors were examined. The intrapersonal factors included perceived risk and personal health beliefs. The interpersonal factors assessed were social support and social networks as well as community and institutions such as health centers, and hospitals influencing medication adherence decisions. Finally, this investigation aimed to contribute to the understanding of why African Americans diagnosed with early onset hypertension failed to remain adherent to prescribed medication therapies. This study investigated adherence to medication for early onset hypertension, which have significant benefit to public health among African American males, given the high rate of morbidity and mortality among African American males who continue to experience for hypertension (Fuch & Whelton 2019). Among the many findings of this research project, the researcher found medical distrust to be one of the most redundant. Is it because public health leaders and practitioners continue to be challenged by the residue effects of the infamous Tuskegee project 1932 to 1972? Some stated that the wrong lesson was learned (Newsome, 2021). The bottom line is a huge medical betrayal took place and this betrayal continue to affect generations of African American up today almost a century later, impacting health care outcome among African Americans.

The research found that there were significant factors, including cultural beliefs and perceptions, as well as the expressed distrust of the health care system, health care providers, and western medications. During this research process, it was revealed by

participants that because they felt that their health providers did not appreciate their cultural beliefs, there was a breakdown in communication which led to a distrust of the care recommended and provided by the health care providers. This dynamic was also observed as not being one-sided. Over 70% of the participants demonstrated low health literacy, such as inadequate knowledge regarding the correct way to take their prescribed medication, inadequate knowledge related to hypertension, and the belief that the poor outcome due to hypertension medication adherence could affect them as individuals. In order not to be labeled or stigmatized, individuals may prefer to settle for ineffective communication than be identified as having low health literacy (Stang et al., 2019; Rural Health, 2022). Providers need to tailor health information to meet the needs of the population served.

The findings of the study shared insight into the importance of cultural influence in health care delivery. Also, the role of patient provider relationship, trust, education, and health literacy. The knowledge gained from this study can influence health care approach and delivery in marginalized community such as African American males with early onset hypertension. The findings also have implications for the development of interventions that are effective, that groups like the African American males with early onset hypertension can relate and meet their needs and requirement for trust.

The researcher recommends for future research on exploring and understanding the perception, beliefs, and experiences of African American males with early-onset hypertension to understand cultural diversity, and willingness to educate themselves regarding cultural traditions on disease management. Overall, future study should also

focus on perspectives of the sociodemographic impact of disease perception and treatment and how these experiences shape medication adherence. Future research should explore the experiences, perceptions, and beliefs of African American males by not limiting adherence to early onset hypertension and expanding the age group.

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Appendix A: Interview Protocol

Interviews will be conducted in-person/social media as a semi-formal discussion.

All interviews will be videotaped.

Protocol

1. The research proposal will be discussed with each prospective participant.
2. The informed consent process will be reviewed and shared with each potential participant.
3. Participants will also be informed of my expectation for honest feedback and my interest in learning about their lived experiences regarding the phenomenon.
4. Immediately prior to the start of the actual interview process, participants will be given the opportunity to express any concern they may have regarding the research and interview procedure.
5. The audio recorder will be turned on just before the interview session starts with each participant to ensure the accuracy of the entire conversation with each participant.
6. At the end of the interview, all recordings of conversations with each participant will be reviewed with each participant.
7. Respondents and prospective participants will ask for suggestions of referrals for potential participants. They will be given the assurance that suggestions are voluntary, and they are free to decline to provide suggestions.
8. I will thank all participants for agreeing to participate in this interview process for my study.

9. The following script will be used:

As previously discussed with you, my study seeks to understand the adherence perception of African American males to gain an understanding of how adherence is perceived in African American males who experience early-onset hypertension. During this interview, I will be documenting behaviors, feelings, opinions, and beliefs, knowledge, and demographics. This interview will last 45 minutes, during which time I will focus my questions on your views, perception of hypertension medication, what you believe influences your adherence, and any other thoughts you may have.

Your informed consent indicates that you are giving me permission to audiotape our conversation. If, for some reason, you are no longer agreeable to having your conversation audiotaped, let me know, and I will do a written recording.

10. At the end of the interview, I will thank participants for their time and effort in participating in this part of my research study process.

11. I will then end the interview and communicate the next steps of the research process to the participants.

Preliminary Screening Questions

Research Topic: Understanding Adherence to Prescribed Medical Regimen to Treat

Hypertension among African American males with hypertension.

1. Gender? _____
2. What is your highest level of education? _____
3. Are you an African American male between 18-45years old?
4. How long have you been diagnosed with hypertension?

Appendix B: Interview Questions

Date:

Research Questions 1

RQ1. How does health literacy influence adherence to hypertension medications among African American males?

Interview Questions for RQ1

- a. How often does somebody help read your prescription?
- b. How confident are you in your ability to take your hypertension medication as prescribed?
- c. What do you think about hypertension medication?
- d. How often do you have problems understanding medical information?
- e. How often do you take your hypertension medication?

Research Question 2

RQ2: How do African American Males with hypertension describe how interaction with family, friends, and workplace influence adherence to hypertension medications?

- a. How did this diagnosis and having to take medication affect your relationship with close friends and family members?

- b. Are there any community resources available to help you in the medical management of your high blood pressure? How did these resources impact your ability to take your medication as your doctor prescribed consistently?
- c. What might you tell your family or friends about your condition?
- d. Did you feel encouraged in changing your lifestyle and behavior regarding this diagnosis
- e. How do you feel about your hypertension diagnosis?
- f. Can you discuss your feelings and approach to the lifestyle change you and your family had to make?
- g. Tell me, how has this lifestyle change affected you, your family, and your friends?
- h. In what way, if any, do the reaction, attitude, or comments of family and friends help you or prevent you from taking your hypertensive medication

Research Question 3

RQ3: How does socio-economic status influence African American males with early-onset hypertension ability to manage hypertension.

Interview Questions for RQ3

- a. Have you ever stopped taking medication because you could not afford to pay for your prescription?

- b. Do you have a health insurance plan that covers your hypertension medication needs?
- c. Do you have easy access to your health care provider if you need a prescription renewal, and do you have easy access to the pharmacy to refill your hypertension medication?
- d. Are there any community resources available to help you in the medical management of your high blood pressure? How did these resources impact your ability to take your medication as your doctor prescribed consistently?
- e. As you think about your financial status, the community where you live, the type of job you do (if you have one), in what way do these things help you or prevent you from taking your hypertension medication?
- f. How do the other socio-economic drivers motivate you to take your hypertension medication?

Research Question 4

RQ 4: How do African American males describes the influence personal beliefs have on adherence to hypertension medication.

Interview Questions for RQ 4

- a. What do you think about hypertension medications?
- b. What is expected to happen to your health from taking hypertension medications?

- c. Do you remember when you were diagnosed with high blood pressure and told you must take medication? What were your feelings at that time?
- d. What problems did you face as you acknowledged this new diagnosis?
- e. How did it affect you on a personal level?
- f. What are some ways you believe that people use to deal with health problems caused by high blood pressure?
- g. As an African American male living with hypertension, what are the specific actions you took to help you take your medication as prescribed?
- h. Tell me more about your hypertension management. Do you believe that the use of herbs and other home remedies can be more effective than medication prescribed by your doctor?
- i. How do you feel about taking medication daily as prescribed by your doctor?
- j. What do you mean? Can you elaborate?
- k. What is your perspective on prescribed hypertension medication for the management of hypertension in African Americans?

Closing Question

10. Is there anything else you would like to add about your experiences of taking hypertension medication that I have not asked you about?

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