KNOWLEDGE AND PERCEPTION OF THE CAUSES AND PREVENTION OF HYPERTENSION AMONG MALE PATIENTS IN KWARA STATE UNIVERSITY TEACHING HOSPITAL, ILORIN, KWARA STATE

BY

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KWARA STATE.

AUGUST , 2025

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS OF BACHELOR OF NURSING SCIENCE FOR THE AWARD OF BNSC NURSING DEGREE CERTIFICATE.

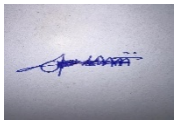
AUGUST, 2025

DECLARATION

This is to declare that this research project **KNOWLEDGE AND PERCEPTION OF THEE CAUSES AND PREVENTION OF HYPERTENSION AMONG MALE PATIENT IN KWARA STATE UNIVERSITY TEACHING HOSPITAL ILORIN, KWARA STATE carried** out by **Owolabi Damilola Henry**, is solely the result of my work except were acknowledged as being derived from other person(s) work or resources.

Matric Number: 20/05NSS023

In the Faculty of Nursing Sciences, Thomas Adewumi University Oko-Irese Kwara State.

Signature:  **Date: 7/08/2025**

Certification Page

This is to certify that this research project by **Owolabi Damilola Henry** with matric number **20/05NSS023** has been examined and approved

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ABSTRACT

This study examined the knowledge and perception of the causes and prevention of hypertension among male patients in Kwara State University Teaching Hospital, Ilorin. The objectives include assessing their understanding of risk factors, investigating their beliefs about the seriousness and manageability of hypertension, and identifying barriers to adopting preventive measures. A descriptive survey design was used, involving 100 male patients selected through purposive sampling. Data were collected using a standardized questionnaire that covered knowledge of hypertension causes, perceptions, and awareness of preventive strategies. Descriptive and inferential statistics were used to analyze the data. The results revealed that while a majority of the respondents were aware of hypertension as a health concern, there were significant gaps in their knowledge of its causes, particularly regarding stress 80% and genetic factors 35%. Furthermore, misconceptions about the seriousness and manageability of hypertension were common, with only a minority of patients fully understanding the importance of lifestyle modifications such as regular exercise 5% and a healthy diet5%. Barriers to adopting preventive measures included lack of information, misconceptions, and low motivation. The findings highlighted the need for comprehensive health education programs targeting male patients, emphasizing the importance of accurate knowledge and lifestyle changes in preventing hypertension. Regular health campaigns and counseling on hypertension management are recommended to improve awareness and reduce the incidence of the disease. The study concluded that patient possess a substantial understanding of the causes and risk factors of hypertension, persistent misconceptions about the condition's seriousness. The study recommended that hospitals and clinics should provide more accessible and affordable preventive healthcare services, including regular blood pressure checks and counseling; Further research should explore gender differences in hypertension knowledge and management to develop tailored interventions for both male and female patients

Keywords: Hypertension, Knowledge, Perception, Prevention, Male Patients, Kwara State

DEDICATION

I dedicate this project to God Almighty

ACKNOWLEDGEMENT

My profound gratitude goes to the Almighty God, who helped me throughout the course of this project and provided all resources that were needed to execute it.

I sincerely appreciate my project supervisor Mrs O.O Aronsanyin for her mentorship, unending support, correction, and guidance during the course of this study.

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CHAPTER ONE

INTRODUCTION

1.0 Background to the study

Hypertension, often known as high blood pressure, is a major public health issue that affects millions of people worldwide. It is defined as a condition when the blood pressure against the arterial walls is consistently too high, usually greater than 140/90 mmHg, according to the World Health Organization (WHO), 2020. If left untreated, hypertension can lead to major health issues like heart disease, stroke, renal failure, and possibly even early death (Smith et al., 2018). The condition is sometimes referred to as a "silent killer" because many people don't realize they have it until it's progressed (Mayo Clinic, 2019).

One of the most prevalent non-communicable diseases in the world, hypertension has a major role in the increase in cardiovascular diseases (CVDs). It is characterized by consistently high blood pressure in the arteries, which is usually measured by a blood pressure measurement at 90 mmHg or higher for the diastolic blood pressure (DBP) or 140 mmHg or higher for the systolic blood pressure (SBP) (WHO, 2020). This essentially occurs when arterial resistance forces the heart to pump blood too forcefully. According to Paril et al. (2018), this sustained pressure destroys blood arteries and can result in serious side effects such heart attacks, strokes, chronic renal disease, and heart failure.

Frequently called the "silent killer," hypertension can go years undiagnosed. Many continue to live with high blood pressure with no symptoms as the damage mounts. It is predicted to cause 7.5 million deaths annually, or around 12.8% of all deaths worldwide, and affect over 1.13 billion people (WHO, 2021). Moreover, according to

Mendis et al. (2020), hypertension is the cause of 62% of strokes and 49% of ischemic heart disease worldwide. There are two categories of hypertension: primary, or necessary, and secondary. Ninety to ninety-five percent of cases of hypertension are primary, meaning that there is no clear cause. However, risk factors include age, family history, obesity, a sedentary lifestyle, and high salt intake (Lackland & Weber, 2022). Secondary hypertension can be brought on by some drugs, such as NSAIDs, or it can be linked to other medical diseases, such as endocrine disorders or chronic renal disease (Weber et al., 2024).

Even though hypertension poses a serious threat to public health, it is frequently mismanaged, particularly in low- and middle-income nations with little healthcare resources. Early detection, encouraging lifestyle modifications, and providing efficient pharmaceutical treatments are the main focuses of global health policies. However, the illness is still a big problem on a global scale.

According to the World Health Organization (WHO, 2021), hypertension affects almost one in three persons worldwide. Better access to medication, healthcare, and awareness has all contributed to constant or even falling incidence of hypertension in high-income countries. Nonetheless, the burden of hypertension has changed dramatically, accounting for about two-thirds of cases worldwide presently, in low- and middle-income nations where healthcare access and awareness are frequently inadequate (Mills et al., 2020).

Prevalence rates differ between areas because of factors like heredity, diet, way of life, and access to healthcare. Thanks to enhanced screening and lifestyle interventions, rates of hypertension have decreased in North America and Europe over the past 20 years (Fryar et al., 2021). However, due to urbanization, dietary and activity changes,

and other factors, rates are rising in regions such as Africa, Southeast Asia, and Latin America (Joffres et al., 2023).

According to Zhou et al. (2017), the prevalence of hypertension among adults in developing nations has reached around 40%, with Eastern Europe, Central Asia, and Sub-Saharan Africa having the highest rates. Along with the natural aging of people, other factors that contribute include decreasing physical activity, stress associated with urbanization, and greater intake of processed foods.

About 30–40% of adults in Sub-Saharan Africa (SSA) currently suffer from hypertension, a condition that has sharply increased in the region (Ataklte et al., 2015). Compared to previous decades when infectious diseases were more common, this is a sharp increase. Lifestyles have changed rapidly due to urbanization; diets low in fruits and vegetables and higher in sodium are now commonplace (Twagirumukiza et al., 2021). Compared to people in rural regions, urban dwellers are more likely to be obese and have high blood pressure due to their more sedentary lifestyles. Rates of hypertension can approach 45% in certain cities (Adeloye et al., 2024).

The low level of awareness and treatment for SSA is still worrisome. Due to difficulties obtaining healthcare and insufficient screening, only 27% of people with hypertension are aware they have the illness, and even fewer receive appropriate treatment (Adeloye et al., 2024). Due to a rise in hospital admissions for hypertension-related consequences such heart attacks and strokes, this has put more strain on the healthcare systems (Ogah et al., 2020).

Hypertension rates have grown to 30–35% in West Africa, where urbanization has similarly changed lifestyles, with urban inhabitants being particularly at risk (Bosu, 2020). Higher rates of obesity and hypertension have resulted from the increased

consumption of processed, high-salt foods and sedentary lifestyles by urban dwellers in countries such as Ghana, Côte d'Ivoire, and Nigeria (Amoah et al., 2023). According to reports, the prevalence of hypertension in Ghana's cities is close to 48%, although rates in rural regions are more like 20% (Amoah et al., 2023).

According to several research, the prevalence of hypertension in Nigeria, the most populous nation in Africa, ranges from 30 to 45% (Kadiri, 2005; Adeloye et al., 2020). According to Agyemang et al. (2022), hypertension is associated with smoking, alcohol consumption, and work stress, placing urban men at an increased risk. Nigerian women, on the other hand, are more vulnerable to pregnancy-related hypertension and increased rates of obesity, especially in metropolitan areas (Akpa et al., 2020; Akinlua et al., 2022).

Access to healthcare is still a significant obstacle in both situations, making hypertension a quiet but deadly pandemic in the area.

1.1 Statement of the problem

The "silent killer," hypertension, is one of the most common but avoidable causes of cardiovascular diseases in the world. In low- and middle-income countries, where knowledge, treatment, and effective management lag far behind, hypertension is still inadequately controlled despite its significant impact on global illness and mortality rates (WHO, 2019). Due in large part to a lack of patient education and a general lack of awareness regarding the causes and prevention of hypertension, the incidence of the condition is rising in places like sub-Saharan Africa (Twagirumukiza et al., 2021). Poor diet, sedentary lifestyles, and excessive salt consumption are significant risk factors

that many people are still unaware of, which causes delayed diagnoses and poor adherence to preventative measures (Mills et al., 2019).

In Nigeria, there is currently a dearth of research on patients' comprehensive understanding of hypertension, particularly with regard to its causes and prevention. It is difficult to create focused educational programs without a thorough grasp of patients' knowledge and beliefs, which perpetuates insufficient hypertension control and preventable consequences (Olawoye et al., 2020). Public health initiatives run the danger of falling short of really connecting with patients if these gaps are not filled, especially in environments where scarce resources make health literacy a crucial part of illness prevention (Ataklte et al., 2024).
The purpose of this study is to evaluate and investigate patients' understanding and attitude on the causes and management of hypertension in Nigeria. Developing an understanding of different viewpoints will enable politicians and healthcare experts to create interventions and instructional initiatives.

1.2 Objectives of the Study

The broad objective of the study is to: assess the knowledge and perception of the causes and prevention of hypertension among male patients in kwara State University Teaching Hospital, Ilorin, kwara state.

The specific objectives of the research are to:

The specific objectives of the research are to:

1. To evaluate the knowledge of male patients regarding the causes of hypertension in Kwara State University Teaching Hospital Ilorin

2. To assess the understanding of preventive measures that can reduce the risk of developing hypertension among male patients in Kwara State University Teaching Hospital Ilorin
3. To identify barriers that male patients face in adopting preventive strategies for hypertension in Kwara State University Teaching Hospital Ilorin

1.3 Significance of the study

One major public health concern is the increased incidence of hypertension, especially in low- and middle-income nations. For the purpose of creating efficient interventions that can lessen this increasing burden, it is essential to comprehend patients' beliefs and level of knowledge on the causes and prevention of hypertension in Kwara State University Teaching Hospital. This research intends to provide a substantial contribution to the body of information regarding the management of hypertension by offering insights into patient awareness, attitude, and misconceptions, especially in areas like Nigeria where the disease is more common, this will assist in government and the hospital policy decision making on hypertension.
First, this study will provide important insights into patients' present knowledge, exposing knowledge gaps that can compromise the efficacy of measures for managing and preventing hypertension. The study's identification of these knowledge gaps will help with the creation of focused educational initiatives that address the specific needs and misconceptions of male patients in Kwara State University Teaching Hospital.

Second, enhancing adherence to treatment plans and preventive actions requires an awareness of patient perspectives. Poor health-seeking habits may result from misconceptions regarding the causes of hypertension, such as the belief that stress or spiritual issues are to blame. With a better understanding of these attitudes, healthcare

providers will be able to design interventions that support patients' views and promote healthier lifestyle choices.

1.4 Research Questions

1. What is the level of knowledge among patients regarding the causes of hypertension?
2. What is the extent of patients understanding of preventive measures that can reduce the risk of developing hypertension?
3. What barriers do patients face in adopting preventive strategies for hypertension ?

1.5 Research Hypotheses

Null hypotheses

1. **Null-Hypothesis (H_{o1}):**

   There is no significant relationship between knowledge and the causes of hypertension among male patients at Kwara State Teaching Hospital

2. **Null-Hypothesis (H_{o2}):**

   There is no significant relationship between male patients' perception of hypertension prevention and their adherence to preventive practices at Kwara State University Teaching Hospital.

Alternative hypotheses

1. **Alternative-Hypothesis (H_{11}):**

   There is a significant relationship between the knowledge and the causes of hypertension among male patients at Kwara State Teaching Hospital

2. **Alternative-Hypothesis (H_{12}):**

   There is a significant relationship between male patients' perception of hypertension prevention and their adherence to preventive practices at Kwara State University Teaching Hospital.

1.6 Scope of the Study

The scope of the study is the male patients of Kwara State University Teaching Hospital Ilorin, kwara state while the research is delimited to their knowledge and perception of the causes and prevention of hypertension.

1.7 Operational Definition of Terms

1. **Knowledge:** This refers to understanding and information patients has on hypertension.
2. **Perception:** This refers to patients view on hypertension
3. **Causes**: The source of or reason for hypertension
4. **Prevention**: This refers to any intentional action to limit health related risk of hypertension
5. **Resident**: This refers to male patients in the hospital setting.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

High blood pressure, or hypertension, is a global public health concern that impacts millions of individuals globally. It is one of the main risk factors for heart disease, stroke, and chronic kidney disease, among other cardiovascular conditions. Because many people with hypertension are unaware that they have the illness, it is sometimes referred to as the "silent killer." This emphasizes how crucial it is to comprehend patients' attitudes and comprehension of the condition's origins and prevention. Patient awareness and adherence to preventive interventions are critical components of effective hypertension therapy. Therefore, investigating the perspectives and understanding of hypertension patients can yield important information for enhancing the course of the condition.

The World Health Organization (2021) estimates that 1.28 billion adults worldwide, between the ages of 30 and 79, suffer from hypertension; two-thirds of these people reside in low- and middle-income nations. Many affected people go undetected, receive insufficient treatment, or are not treated at all, which has contributed significantly to the condition's role as a leading cause of premature mortality worldwide. The incidence of hypertension has been rising significantly as a result of sedentary lifestyles, urbanization, and dietary modifications. Given its widespread prevalence, it is essential to comprehend patients' opinions of the causes and prevention of hypertension as well as their level of knowledge about the condition in order to inform public health initiatives.

Understanding preventive measures, especially those pertaining to lifestyle adjustments, is essential for managing hypertension. There is ample proof that lifestyle choices including food, exercise, smoking, and alcohol use have a big impact on blood pressure levels. The Dietary Approaches to Stop Hypertension (DASH) diet, frequent exercise, weight loss, and a lower intake of salt are among the lifestyle changes that the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure states are beneficial in preventing and controlling hypertension (Whelton et al., 2019). Despite this, studies have indicated that patients frequently lack sufficient knowledge of these preventive measures.

Research has shown that a large number of hypertension patients are not aware of the link between blood pressure control and lifestyle decisions. For example, less than 30% of hypertension patients recognized that cutting back on salt could help lower their blood pressure, according to a study done in rural Uganda (Ataklte et al., 2019). In a similar vein, people are frequently unaware of the advantages of consistent exercise and weight control in preventing hypertension, especially in societies where sedentary lifestyles and high-calorie meals are the norm.

Patients' comprehension and use of hypertension-related health information are significantly influenced by their level of health literacy. Many people struggle with low health literacy, especially in areas with few resources where educational attainment may be lower. Poor health outcomes might arise from misconceptions regarding the causes and prevention of hypertension caused by a lack of health literacy. Nutbeam (2020), for example, highlighted that patient with low health literacy are less likely to follow dietary advice or take care of their blood pressure at home. In order to properly communicate with patients about hypertension, healthcare providers also encounter challenges. Effective patient education can be hampered by time limits, cultural

differences, and language obstacles during consultations. Furthermore, a lot of patients would rather get their health information from community-based sources than from medical experts, like family members or traditional healers, which could contribute to the spread of false information regarding the illness (Lwanga et al., 2019).

The review of related literature will be discussed under three main headings:

- Conceptual review
- Empirical review
- Theoretical framework

2.1 Conceptual review

High blood pressure, or hypertension, is a major cause of cardiovascular illnesses and a major global health concern. It is frequently referred to as the "silent killer" because many people who are impacted are ignorant of their illness; this emphasizes how crucial it is to comprehend patient perception and awareness of the condition's causes and prevention. In this context, "knowledge" refers to people's understanding of hypertension, including its causes, symptoms, problems, and methods of care. Research indicates that although people are becoming more aware of hypertension, there are still large knowledge gaps, particularly when it comes to modifiable risk factors including nutrition, exercise, and weight control (Zhang et al., 2019).

Misconceptions regarding the illness are widespread, especially in environments with few resources. One such misconception is that it is just a hereditary problem (Bosu, 2020). Patients may not follow treatment recommendations or take adequate preventative measures as a result of these knowledge gaps, which can lead to poor health outcomes (Kayima et al., 2023).

Health behavior is greatly influenced by people's perceptions, especially regarding the seriousness of the consequences associated with hypertension and their own vulnerability to it. The Health Belief Model states that people who believe they are at danger of developing a serious illness are more inclined to take preventative action (Champion & Skinner, 2021).

Unfortunately, a lot of individuals think that hypertension only affects elderly people, which can cause a delay in diagnosis and treatment. Some see it as a short-term problem that can be "cured" instead of a long-term illness that needs ongoing care. These beliefs frequently result in treatment regimen non-adherence and an underestimating of the significance of lifestyle modifications like cutting back on salt and upping physical exercise (Kayima et al., 2023). A healthy diet, frequent exercise, and stress reduction are all important lifestyle choices that can help prevent hypertension. Blood pressure can be effectively regulated by following public health recommendations, like the DASH diet (Whelton et al., 2019). Nevertheless, research indicates that a large number of patients, particularly in areas with low health literacy, are not aware of these therapies (Ataklte et al., 2019). Improving access to health information, culturally aware communication, and focused education are essential ways to close these gaps and improve patient outcomes while lowering the prevalence of hypertension worldwide.

2.1.1 Management of Hypertension

Medicinal therapies, lifestyle changes, and routine monitoring are all part of the complex process of managing hypertension and lowering the risk of cardiovascular problems. The goal of managing hypertension is to bring blood pressure down to safe ranges while limiting harm to vital organs such the kidneys, brain, and heart. In addition

to lowering the condition's related morbidity and death rate, effective treatment significantly enhances patients' quality of life.

2.1.2 Lifestyle Modifications

A key component of managing hypertension is changing one's lifestyle, especially for those with mild to moderately elevated blood pressure. The underlying causes of high blood pressure, such as nutrition, exercise, stress, and substance abuse, are the main targets of these changes. The Dietary Approaches to Stop Hypertension (DASH) diet, which promotes the consumption of fruits, vegetables, whole grains, lean protein, and low-fat dairy products while limiting sodium, saturated fats, and added sugars, is one of the most commonly advised therapies (Whelton et al., 2019). It has been demonstrated that this dietary strategy considerably lowers blood pressure in both hypertensive and non-hypertensive people. Another essential element in the therapy of hypertension is physical activity. Frequent cardiovascular exercise, like cycling, swimming, or walking, can improve cardiovascular health and lessen arterial stiffness, which can lower blood pressure. For hypertension individuals, the American Heart Association suggests at least 150 minutes of moderate-intensity exercise each week (Whelton et al., 2019). Effective blood pressure regulation also involves cutting back on alcohol, giving up smoking, and controlling stress with methods like deep breathing and meditation (Agyemang et al., 2020).

2.1.3 Pharmacological Treatment

Pharmacological treatment is required for patients with more severe hypertension or for those whose lifestyle modifications are insufficient to bring their blood pressure down to goal levels. There are several kinds of antihypertensive drugs available, and

the patient's overall health profile, underlying medical issues, and the degree of their hypertension will all influence which course of treatment they choose.

Diuretics: When treating hypertension, they are frequently the first medications used. Diuretics lower blood pressure and volume by assisting the kidneys in getting rid of extra salt and water.

ARBs and ACE Inhibitors: By preventing the synthesis or activity of the hormone angiotensin, which narrows blood vessels, angiotensin-converting enzyme (ACE) inhibitors and angiotensin II receptor blockers (ARBs) relax blood arteries.

Calcium channel blockers: These drugs lower blood pressure by preventing calcium from entering the heart's cells and blood vessel walls.

Beta-Blockers: These medications lower blood pressure by slowing the heartbeat and the heart's blood flow.

When treating severe or resistant hypertension, combination therapy is frequently utilized, involving the prescription of two or more antihypertensive medications from several classes for the ideal regulation of blood pressure (Whelton et al., 2018). In order to maximize effectiveness and minimize side effects, patients should be started on low-dose combinations of medicines, according to the 2017 ACC/AHA Guidelines (Whelton et al., 2019).

2.1.4 Regular Monitoring and Patient Education

In order to measure therapy success and make appropriate adjustments to therapies, ongoing monitoring is essential to the management of hypertension. Patients who use home blood pressure monitoring are advised to verify their results on a frequent basis as this can yield more accurate readings than sporadic measurements in clinical settings. Additionally, monitoring aids in the identification of "masked hypertension," in which

a patient's blood pressure is normal in the clinic but high at home, and "white-coat hypertension," in which a patient's blood pressure is elevated in clinical settings but normal at home (Kayima et al., 2019).

In order to ensure adherence to drug regimens as well as lifestyle adjustments, patient education is essential. Research has indicated that patients' willingness to adhere to therapy is greatly impacted when they are aware of the long-term hazards associated with uncontrolled hypertension (Nutbeam, 2020). In order to properly manage hypertension, educational programs that stress the need of medication adherence, dietary modifications, and regular physical activity are crucial.

2.1.5 Systolic and Diastolic Pressure

Blood Pressure Systolic

The first number in a blood pressure reading is the systolic blood pressure, or SBP. It gauges the pressure within the arteries during a heartbeat and blood pumping. The heart's ventricles contract during this part of the cardiac cycle, referred to as systole, forcing blood into the arteries. The systolic value reflects the maximum pressure created by this contraction within the artery walls. The systolic blood pressure, for instance, is 120 mmHg if the blood pressure reading is recorded as 120/80 mmHg. Particularly in older persons, elevated systolic blood pressure is frequently a substantial risk factor for cardiovascular illnesses. A systolic blood pressure of 130 mmHg or over is considered hypertension, under the 2017 American College of Cardiology/American Heart Association guidelines (Whelton et al., 2019).

2.1.6 Diastolic Blood Pressure

The second figure in a blood pressure reading is the diastolic blood pressure, or DBP. When the heart is at rest in between beats, or in the diastole phase, it measures the

pressure in the arteries. During this stage, blood fills the heart's chambers and the arterial pressure drops. The lowest pressure applied to the artery walls during the cardiac cycle is shown by the diastolic measurement.

The diastolic blood pressure in the given blood pressure example of 120/80 mmHg is 80 mmHg. Assessing diastolic blood pressure is crucial for determining cardiovascular risk. According to Walton et al. (2019), a diastolic value of 80 mmHg or over may suggest hypertension or raised blood pressure, although a reading below that threshold is typically regarded as normal.

The Value of Both Measures

Systolic and diastolic blood pressure measurements are essential for assessing cardiovascular health in general:

• Systolic Pressure: Generally seen as a more important metric in people over 50 considering its stronger correlation with cardiovascular events such heart attacks and strokes (Lloyd-Jones et al., 2020).

• Diastolic Pressure: Elevated diastolic pressure can be a major risk factor in younger persons, despite the fact that it is typically thought to be less significant than systolic pressure in older groups.

2.1.7 Elasticity of Arterial Walls

1. Systolic Pressure: Generally seen as a more important metric in people over 50 considering its stronger correlation with cardiovascular events such heart attacks and strokes (Lloyd-Jones et al., 2020).
2. Diastolic Pressure: Elevated diastolic pressure can be a major risk factor in younger persons, despite the fact that it is typically thought to be less significant than systolic pressure in older groups.
3. Stiffer Arteries: Peripheral resistance rises as a result of stiffer arteries. Resistance builds up when the arteries are unable to sufficiently expand to hold the volume of blood that the heart pumps, which raises blood pressure. Because arterial stiffness is more common in older persons, this issue is more problematic (Laurent et al., 2019).
4. Aging and Changes in Structure: Age-related structural alterations to artery walls, such as the buildup of collagen and the deterioration of elastin fibers, impact their elasticity. Stiffer arteries as a result of these alterations are less able to adapt to variations in blood flow. Particularly in the elderly, this age-related stiffness plays a major role in isolated systolic hypertension (McEniery et al., 2024).
5. Endothelial dysfunction: This condition, in which the inner lining of blood vessels malfunctions, is frequently linked to reduced arterial flexibility. This malfunction can exacerbate hypertension by causing decreased vasodilation and increased vasoconstriction. Blood pressure management becomes challenging when the endothelium's function is impaired since it is essential in releasing chemicals that control vascular tone (Furchgott & Zawadzki, 2020).

2.1.8 Factors Determining Blood Pressure

Blood pressure is determined by cardiac output and peripheral resistance. Change in either of these parameters tends to alter systemic blood pressure, although the body's compensatory mechanisms usually adjust for any significant change.

1. **Cardiac Output (CO)**:
   Heart rate (HR) multiplied by stroke volume (SV) yields cardiac output, which is the amount of blood the heart pumps out per minute. For example, elevated cardiac output brought on by exercise or stress causes an increase in blood pressure (Guyton & Hall, 2023). According to Guyton and Hall (2023), the average resting cardiac output is 4-6 L/min, but it can reach 20–25 L/min with vigorous activity. On the other hand, blood pressure is lowered by decreased cardiac output, which is observed in heart failure (Guyton & Hall, 2023).
2. **Autoregulation**:
   Despite variations in systemic blood pressure, autoregulation aids in maintaining steady blood flow to vital organs such as the kidneys and brain (Hall, 2016). The cerebral blood flow, for example, is controlled within a range of 60-140 mmHg for mean arterial pressure (MAP). Blood flow diminishes below 60 mmHg and may result in ischemia; vascular injury is more likely at pressures exceeding 140 mmHg (Tzeng & Ainslie, 2024).

3. **Demographic Factors**:

Age: Because artery stiffness occurs with aging, blood pressure tends to rise with age. After 40, there is an average 5–10 mmHg increases in systolic blood pressure per decade (Franklin et al., 2019).

Gender: Until menopause, women may have elevated blood pressure, potentially reaching a systolic BP of 130–140 mmHg (Whelton et al., 2019). Generally, men have higher blood pressure than women.

Ethnicity: Compared to other ethnic groups, African-Americans have average systolic pressures that are 5–10 mmHg higher, making them more susceptible to hypertension (Lackland, 2020).

Genetics: According to Lifton et al. (2001), there is a 20–50% increased risk of developing high blood pressure if there is a family history of hypertension.

4. **Psychosocial Factors**:

Socioeconomic status (SES) and psychosocial stress are important factors in blood pressure regulation (Kivimäki & Steptoe, 2019). The sympathetic nervous system is activated by prolonged stress, which can cause blood pressure to rise by 10–15 mmHg (Kivimäki & Steptoe, 2018). Due to heightened stress and restricted access to healthcare, a lower socioeconomic status is linked to an increased risk of hypertension (Diez Roux, 2020). Additionally, by increasing stress levels, social isolation or a lack of social support might raise blood pressure (Uchino et al., 2019).

5. **Behavioral Factors**:

Diet: Consuming a lot of salt causes the body to retain more fluid, which raises blood pressure. Systolic blood pressure can drop by 2–8 mmHg by consuming no more than 1,500 mg of sodium each day (Appel et al., 2021).

Physical Activity: 4–9 mmHg can be taken off the systolic blood pressure with regular exercise. Blood pressure is considerably lowered by moderate physical exercise, such as walking for 30 minutes a day (Pescatello et al., 2019).

Alcohol Consumption: According to Puddey et al. (2019), consuming excessive amounts of alcohol (more than two drinks per day for men and one drink per day for women) causes a 5–10 mmHg increases in systolic pressure.

Smoking: Smoking increases the risk of hypertension by permanently damaging blood vessels and momentarily raising systolic blood pressure by 5–10 mmHg (Primatesta et al., 2021).

Obesity: For every 10 kg of weight gain, the systolic pressure rises by 2-3 mmHg, indicating an increase in blood pressure associated with being overweight (Chobanian et al., 2023).

6. **Access to Healthcare**:

In order to identify and treat hypertension, access to healthcare is essential. Systolic BP can be lowered by 10–20 mmHg with early management and consistent monitoring (Whelton et al., 2019). Ineffective blood pressure management can be hampered by limited access to healthcare due to issues like cost or lack of insurance, which raises the risk of complications including heart disease and stroke (Diez Roux, 2021).

2.1.9 Prevention of Hypertension

Preventing high blood pressure involves a comprehensive approach that includes lifestyle modifications, dietary changes, regular physical activity, stress management, and regular health monitoring. Here are detailed strategies for preventing hypertension:

1. **Maintain a Healthy Diet:**

   In order to prevent hypertension, one must eat a balanced diet low in saturated fats and high in fruits, vegetables, whole grains, and lean meats. Due to its emphasis on lowering sodium intake to less than 2,300 mg/day, or ideally 1,500 mg/day, the DASH (Dietary Approaches to Stop Hypertension) diet is very successful (Appel et al., 2021). Consuming foods high in potassium, such as potatoes, spinach, and bananas, can help balance out the effects of salt and bring down blood pressure (Appel et al., 2021).

2. **Regular Physical Activity**:

   Preventing hypertension requires regular physical activity. 30 minutes a day of aerobic exercise, such as cycling, swimming, running, or walking, can reduce systolic blood pressure by 4 to 9 mmHg (Pescatello et al., 2020). Exercises for flexibility and strength help improve cardiovascular health overall.

3. **Limit Alcohol Intake**:

   Drinking too much alcohol can cause blood pressure to rise. Men should limit their alcohol consumption to no more than two drinks per day, while women should only have one drink (Puddey et al., 2019). While there may be some

cardiovascular benefits to moderate consumption, going beyond these limits greatly raises the risk of hypertension.

4. **Weight Management**:

It is essential to maintain a healthy body weight in order to control blood pressure. Obesity and overweight are major risk factors for hypertension; for every kilogram of extra weight, blood pressure rises by about 2-3 mmHg (Chobanian et al., 2023). Blood pressure can drop significantly as a result of losing weight, especially in people who are already at risk.

5. **Reduce Stress**:

Because of the sympathetic nervous system's sustained activation during periods of stress, blood pressure is increased. Deep breathing exercises, yoga, mindfulness meditation, and getting enough sleep are some stress-reduction strategies that can help lower the risk of hypertension and reduce stress (Kivimäki & Steptoe, 2019).

6. **Limit Sodium Intake**:

There is a clear correlation between high blood pressure and sodium intake. Lowering daily sodium intake to 1,500–2,300 mg can aid in the prevention of hypertension. Due to their frequent high sodium content, processed meals, canned soups, and fast food should be avoided (Appel et al., 2021).

7. **Quit Smoking**:

Smoking contributes to the development of hypertension by raising blood

pressure momentarily and damaging blood vessels over time (Primatesta et al., 2021). The immediate benefits of quitting smoking include improved cardiovascular health and blood pressure regulation.

8. **Regular Health Screenings**: Blood pressure can be detected and monitored early with routine visits to a healthcare professional. According to Walton et al. (2019), adults should get their blood pressure measured at least once a year, and more regularly if they have a family history of the condition, obesity, or diabetes that puts them at higher risk.

9. **Manage Chronic Conditions**: The risk of hypertension is increased by illnesses such renal disease, diabetes, and excessive cholesterol. The beginning of high blood pressure can be avoided by managing these disorders appropriately with medication and lifestyle modifications (Whelton et al., 2019).

10. **Medications When Necessary**: Prescription drugs such as ACE inhibitors, calcium channel blockers, or diuretics may be given to those who are prehypertensive (systolic pressure of 120–139 mmHg) or at high risk of developing hypertension in order to stop the condition from progressing to hypertension (Chobanian et al., 2023).

2.1.10 Evaluating the Overall Knowledge of Male Patients Regarding the Causes of Hypertension in Kwara State University Teaching Hospital.

Improving hypertension control and prevention measures requires assessing male patients' general understanding of the causes and risk factors of hypertension. High blood pressure, or hypertension, is a major risk factor for cardiovascular conditions such heart attacks and strokes (World Health Organization [WHO], 2021). Studies indicate that patients' capacity to properly manage hypertension is influenced by their understanding of the ailment and its risk factors (Jones et al., 2019). A variety of social and cultural elements have been found to present special challenges for male patients in particular when it comes to comprehending and treating hypertension. Thus, assessing male patients' awareness of hypertension can yield information that helps develop specialized educational and therapeutic plans. Because it commonly manifests without symptoms, hypertension is known as the "silent killer"; nonetheless, if treatment is not received, it can result in serious health problems (WHO, 2021). Therefore, understanding the risk factors for hypertension—such as age, heredity, obesity, sedentary lifestyle, poor food, excessive alcohol use, and smoking—is essential for both management and prevention. In comparison to female patients, male patients frequently show lower levels of healthcare participation, which may lead to a lack of awareness and information about the condition (Mills et al., 2018). Healthcare professionals can create more effective communication and education initiatives specifically targeted at male patients by having a better understanding of the level of information held by this group. Research indicates that males are less inclined than females to pursue preventive healthcare services, potentially resulting in deficiencies in their knowledge regarding hypertension and its associated risk factors (Weinstein et

al., 2020). Men may have lower health literacy and delayed diagnosis as a result of social expectations that prevent them from talking about their health (Thompson et al., 2019).

Assessing male patients' knowledge of both modifiable and non-modifiable risk factors is part of evaluating their hypertension awareness. Patients tend to have a better understanding of modifiable risk variables, including physical activity, smoking, and food, than non-modifiable risk factors, like age, race, and family history (Weinstein et al., 2020). But according to study, males may be less likely than women to alter their behavior even if they are aware of modifiable risk factors (Mills et al., 2019). One area of concern is male patients' awareness of lifestyle-related risk factors for hypertension, including food and physical exercise. Studies have indicated that while many men are aware that poor dietary choices contribute to high blood pressure, fewer are aware of the precise function that salt plays in hypertension (Glynn et al., 2020). Excessive salt intake is one of the primary causes of hypertension, although many male patients are ignorant of recommended sodium limits or how to properly reduce sodium in their diet. The absence of resources and instruction specifically designed to address the unique nutritional needs of men is the reason for this knowledge gap (Thompson et al., 2019).

Men could also be unaware of the amount of physical activity needed to lower their risk of hypertension, even though it is commonly known that physical inactivity is a risk factor for the condition. Improving male patients' understanding requires education programs that support regular exercise and give precise instructions on the kind and quantity of exercise required to control blood pressure. Men are more likely than women to smoke and drink excessive amounts of alcohol, both of which raise the risk of hypertension (Jones et al., 2019). Despite this, male patients frequently

underestimate the impact of these behaviors on their blood pressure; studies have shown that many male patients think that moderate alcohol consumption does not pose a significant risk to their health, despite the fact that research suggests that even moderate drinking can raise blood pressure over time (Mills et al., 2019). Similarly, although smoking is widely acknowledged as harmful, many men are unaware of its direct connection to hypertension. Addressing these misconceptions through targeted education is essential for lowering the rate of hypertension among male patients. Men are more likely than women to smoke and drink excessive amounts of alcohol, both of which raise the risk of hypertension (Jones et al., 2019). Despite this, male patients frequently underestimate the impact of these behaviors on their blood pressure; studies have shown that many male patients think that moderate alcohol consumption does not pose a significant risk to their health, despite the fact that research suggests that even moderate drinking can raise blood pressure over time (Mills et al., 2018). Similarly, although smoking is widely acknowledged as harmful, many men are unaware of its direct connection to hypertension. Addressing these misconceptions through targeted education is essential for lowering the rate of hypertension among male patients.

Targeted interventions that address the unique barriers and misconceptions men have about their health are necessary to improve male patients' understanding of hypertension. Health education campaigns should emphasize the importance of diet, physical activity, and abstaining from harmful behaviors like smoking and excessive alcohol consumption, as well as raising awareness of both modifiable and non-modifiable risk factors for hypertension (WHO, 2021). Regular blood pressure monitoring and routine healthcare visits can also help improve early detection and management of hypertension among men.

2.1.11 Identifying Barriers that Male Patients Face in Adopting Preventive Strategies for Hypertension in Kwara State Teaching Hospital, Ilorin.

Identifying the challenges that male patients face when using hypertension prevention measures is crucial for improving public health outcomes. Hypertension, also known as high blood pressure, is a major risk factor for cardiovascular diseases such as heart attack and stroke, and it disproportionately affects men, particularly those who are less likely to engage in preventive behaviors or follow treatment regimens (World Health Organization [WHO], 2021). Male patients frequently confront specific challenges arising from social, cultural, and psychological factors that have a substantial impact on their health-seeking behaviors and treatment adherence (Wong et al., 2020). Understanding these limitations can help healthcare practitioners design more targeted interventions to enhance male health outcomes.

One of the most significant hurdles that men experience when implementing hypertension prevention techniques is a lack of awareness and understanding regarding the condition and its risk factors. According to studies, males are less likely than women to seek preventative care from healthcare providers, which might result in a delayed comprehension of the hazards associated with hypertension (Courtenay, 2019). Men may consider themselves as less vulnerable to health conditions, which contributes to lower levels of health literacy about hypertension. Harris et al. (2018) discovered that male patients frequently underestimate their risk of hypertension and may be unaware of the influence that lifestyle factors such as nutrition, physical activity, and smoking have in raising their blood pressure.

This lack of understanding can discourage men from taking proactive efforts to improve their health, such as changing their diet, lowering alcohol consumption, or engaging in

regular physical activity. Cultural and social norms influence male patients' health-seeking activities and attitudes toward preventative care. In many cultures, conventional conceptions of masculinity stress strength, self-reliance, and perseverance, which causes men to postpone getting medical attention or expressing their health concerns.

These gender norms may contribute to men's reluctance to implement hypertension prevention techniques, as seeking medical care or acknowledging susceptibility may be interpreted as weakness. According to Mahalik et al. (2021), men who strongly identify with conventional masculine ideals are less likely to seek preventive care and may wait until their health worsens. This delay in seeking care might result in poor health outcomes, as early detection and treatment of hypertension are critical for avoiding problems.

Economic restrictions have a substantial impact on men's capacity to adopt hypertension prevention techniques. Men from lower socioeconomic backgrounds may have reduced access to healthcare services, nutritious diets, and physical exercise possibilities (Mills et al., 2020). Economic constraints can make it difficult for men to afford the regular medical checkups, medications, and lifestyle changes required to manage hypertension. Furthermore, men who work long hours or have many jobs may struggle to schedule medical appointments or exercise on a regular basis. Men who lack access to resources may be less likely to follow hypertension preventive and treatment measures, increasing their risk of problems.

Psychological impediments, such as stress and mental health issues, also have an impact on male patients' capacity to follow hypertension prevention programs. Stress, in particular, has been established as a major contributor to high blood pressure, and men

are frequently more susceptible to stress due to work-related pressures and cultural expectations (Wong et al., 2020). According to research, males who are stressed are less likely to engage in beneficial activities, such as regular physical activity or healthy eating, and more likely to engage in dangerous behaviors, such as smoking or excessive alcohol use (Courtenay, 2019). These stress-related behaviors not only raise the risk of hypertension, but also hinder treatment adherence, for example, male patients who are under chronic stress may struggle to stick to drug schedules or attend follow-up appointments, resulting in poor blood pressure control and an increased risk of hypertension-related problems.

Men's commitment to hypertension treatment is often hampered by pharmaceutical side effects. Some male patients may be hesitant to use antihypertensive drugs because they are concerned about side effects such as sexual dysfunction, exhaustion, or dizziness (Harris et al., 2018). These adverse effects may dissuade men from following prescribed treatment regimens, particularly if they believe the medications are interfering with their quality of life. Educating male patients on the importance of medication adherence and offering information on how to manage side effects will assist increase their willingness to follow treatment protocols. Furthermore, healthcare providers should collaborate with male patients to seek alternate medication alternatives or adjust dosages in order to reduce adverse effects while efficiently controlling blood pressure.

Addressing the hurdles that male patients confront while implementing hypertension prevention techniques necessitates a multimodal approach that takes into account both individual and systemic factors influencing their health habits. Healthcare practitioners can play an important role by providing focused education that tackles knowledge gaps and challenges cultural norms that dissuade males from obtaining preventive care

(Mahalik et al., 2021). Public health campaigns should also promote the benefits of early detection and management of hypertension, highlighting the significance of frequent check-ups and lifestyle modifications. Furthermore, policies that increase healthcare access, lower economic obstacles, and provide mental health assistance are critical to ensuring that men have the resources they require to adopt and sustain healthy behaviors.

2.1.12. Assessing the Understanding of Preventive Measures that can Reduce the Risk of Developing Hypertension Among Male Patients in Kwara State University Teaching Hospital.

Assessing male patients' awareness and grasp of preventative strategies that can minimize their risk of developing hypertension is crucial in tackling one of the world's major causes of cardiovascular disease. Hypertension, often known as high blood pressure, is a key risk factor for heart attacks, strokes, and renal disease, and its prevalence is increasing globally, particularly among males (World Health Organization [WHO], 2021). Preventive approaches for lowering hypertension risk include keeping a nutritious diet, engaging in regular physical activity, avoiding tobacco and excessive alcohol consumption, and managing stress (Weber et al., 2019).

However, male patients' awareness and understanding of these preventative interventions remain low, which is reflected in their health habits. Understanding the gaps in awareness and understanding is critical to creating effective strategies to prevent hypertension in males.

Men are less likely than women to seek preventive healthcare services, which might lead to a lack of understanding about hypertension and its risk factors (Courtenay, 2019). This trend is exacerbated by social and cultural barriers that prohibit males from

communicating their health concerns or engaging in preventative health activities (Mahalik et al., 2021). According to studies, while most men are aware of hypertension as a health disease, many do not have a thorough awareness of the preventive steps that can lower their chance of acquiring it, for example, Glynn et al. (2019) discovered that male patients frequently underestimated the relevance of lifestyle adjustments, such as reducing salt intake, engaging in regular physical activity, and limiting alcohol use, in preventing hypertension.

Dietary factors are important in the prevention of hypertension; however, evidence suggests that male patients may not completely appreciate the impact of their dietary choices on blood pressure. Many men are ignorant of the suggested dietary guidelines for sodium intake, which is a major contributor to hypertension (Himmelfarb et al., 2023). High salt consumption is associated with high blood pressure, and lowering sodium intake is one of the most effective ways to prevent hypertension. However, studies show that many male patients do not consciously check their salt intake or replace high-sodium foods with healthier options (Weber et al., 2019). This knowledge gap highlights the importance of focused nutritional education for males, namely teaching them how to identify and limit sodium sources in their diet.

In addition to food awareness, male patients frequently lack information about the function of physical activity in hypertension prevention. Regular exercise has been shown to be an effective preventive therapy for lowering blood pressure and improving cardiovascular health. Despite this, studies indicates that many men do not get enough physical activity to lower their risk of hypertension (Mills et al., 2020). While some male patients may understand the basic benefits of exercise, they may be unaware of the particular recommendations for how much and what type of exercise is required to effectively lower blood pressure levels, for example, the AHA recommends at least

150 minutes of moderate-intensity aerobic activity per week for adults to promote heart health and avoid hypertension, a recommendation that is frequently ignored by men (AHA, 2020).

The use of alcohol and tobacco also adds significantly to the development of hypertension, but many male patients are unaware of how much these substances influence their blood pressure. According to research, men are more likely than women to use alcohol and use tobacco, both of which are linked to an elevated risk of hypertension (Mills et al., 2020). However, male populations remain unaware of the hazards associated with these habits, particularly moderate alcohol intake. Many men believe that only heavy drinking causes hypertension, however studies demonstrate that even moderate alcohol use can raise blood pressure over time (Weber et al., 2018). Similarly, while smoking is widely acknowledged as dangerous, fewer men are aware of its direct effect on blood pressure. Raising awareness of these risk factors through public health initiatives and patient education is critical to encouraging men to adopt healthier habits. Stress management is another protective intervention that many male patients overlook. Chronic stress is associated with elevated blood pressure, and effective stress management practices like as mindfulness, relaxation exercises, and time management can help reduce hypertension risk (AHA, 2020). However, many men may be unaware of the link between stress and blood pressure, or they may lack the skills required to properly manage stress. Cultural norms that prevent males from showing vulnerability or getting treatment for mental health issues might compound the problem, increasing uncontrolled stress and the risk of hypertension (Mahalik et al., 2021). Educating males on the need of stress management and giving resources for learning stress-reduction techniques will help prevent hypertension. To effectively address the disparities in male patients' awareness and understanding of hypertension

prevention, healthcare practitioners must take a multimodal approach. This includes educational programs that are geared to the specific social and cultural elements that influence men's health practices. Public health campaigns should emphasize the importance of lifestyle changes in hypertension prevention and provide specific, practical advice on dietary changes, physical activity, and avoiding dangerous substances (Courtenay, 2019). Furthermore, healthcare practitioners should involve male patients in discussions about stress management and the significance of routine blood pressure monitoring, both of which are critical for preventing the development of hypertension.

2.2. Empirical Review

Hypertension, often known as high blood pressure, is a prominent risk factor for cardiovascular disease worldwide and a major cause of death and morbidity (World Health Organization [WHO], 2021). Despite improvements in medical science, a large number of the community is still uneducated or confused about hypertension, particularly its causes and prevention. Men, in particular, are more likely to acquire hypertension than women, owing to lifestyle choices, biological variables, and social effects (Mills et al., 2020). This empirical review investigates male patients' knowledge and perceptions of the causes and prevention of hypertension, offering a thorough grasp of the elements that influence awareness and attitudes toward this essential public health issue. Male patients' awareness of hypertension and its causes is an important predictor of their capacity to control and prevent the condition. A rising corpus of research shows that male patients have poorer levels of hypertension awareness and understanding than female patients (Courtenay, 2019). Several research have investigated the elements that contribute to this knowledge gap, with sociocultural and

gender norms playing a substantial influence in affecting men's health behaviors and attitudes toward preventive treatment (Mahalik et al., 2021).

Himmelfarb et al. (2019) discovered that male patients were less aware of significant risk factors for hypertension than female patients, such as high sodium intake, physical inactivity, obesity, and excessive alcohol consumption. The study also found that, while many male patients had heard of hypertension, they often lacked a thorough knowledge of how these risk factors could lead to the development of the condition. This lack of understanding was most prominent among men from low-income families, who had limited access to health education and preventive programs.

Furthermore, Glynn et al. (2018) investigated the levels of hypertension awareness in male patients and discovered that, while most men were familiar with the basic idea of high blood pressure, many did not understand the long-term health consequences of uncontrolled hypertension. This study also found that younger male patients, in particular, underestimated their chance of acquiring hypertension, often mistaking it for an illness that only affects older persons. This myth may discourage younger men from taking preventive steps early on, such as frequent blood pressure monitoring and lifestyle changes. Cultural ideas, personal experiences, and the availability of health information all influence how male patients perceive the causes of hypertension. According to research, men's perceptions of hypertension frequently deviate from medical consensus, with many patients attributing the problem to stress and inherited causes rather than lifestyle decisions (Wong et al., 2020). While stress and heredity play a role in the development of hypertension, focusing on these factors may overshadow the impact of modifiable risk factors including diet, exercise, and alcohol intake. Harris et al. (2020) discovered that many male patients believed that emotional

stress was the primary cause of hypertension, therefore they prioritized stress management over other preventive strategies like dietary changes or increased physical activity. This viewpoint is especially prevalent in high-pressure work contexts, when men may see hypertension as an unavoidable result of their job demands. While stress is a significant factor to hypertension, focusing primarily on stress reduction may lead to the neglect of other important preventive techniques. Furthermore, cultural views and conventions about masculinity can influence how male patients perceive the causes of hypertension. According to Mahalik et al. (2021), traditional ideas of masculinity that emphasize strength and resilience can encourage men to underestimate the impact of lifestyle variables in hypertension. Men who follow these norms may be less likely to recognize the negative effects of poor food, smoking, or physical inactivity on their health, considering these practices as unconnected to their blood pressure. This cultural impact can be a barrier to successful hypertension prevention, as men may be hesitant to adopt the necessary lifestyle adjustments to lower their risk. The prevention of hypertension is primarily dependent on patient knowledge and understanding of lifestyle changes that can reduce risk. However, studies show that male patients frequently lack a thorough awareness of the precise preventative steps necessary to reduce their risk of hypertension (Weber et al., 2019). While some men may be aware of general advice, such as lowering salt intake or exercising regularly, many are unaware of how much these acts might lower their blood pressure. Glynn et al. (2018) investigated male patients' knowledge of hypertension prevention and discovered that, while many were familiar with recommendations such as reducing alcohol intake or quitting smoking, fewer understood the importance of consistent physical activity or sodium-specific dietary guidelines. This information gap was more significant among men who had not previously had hypertension-related health problems, implying that

the perceived severity of the condition may influence men's willingness to engage in preventive interventions. Furthermore, socioeconomic factors significantly influence male patients' understanding of hypertension prevention. Men from lower socioeconomic backgrounds frequently have fewer access to health education and preventative services, resulting in decreased awareness of hypertension prevention (Mills et al., 2020). In a study conducted by Wong et al. (2020), males with lower incomes were found to be less knowledgeable of the dietary and lifestyle adjustments required to prevent hypertension. This study emphasizes the necessity of addressing health inequities through targeted education and intervention initiatives for high-risk populations. Male patients' knowledge and perceptions of hypertension influence their health habits and adherence to preventive interventions. Men who are more knowledgeable on the causes and prevention of hypertension are more likely to engage in healthier behaviors such as eating a balanced diet, exercising regularly, and avoiding tobacco and excessive alcohol consumption (Weber et al., 2018). However, the opposite is also true: men who are unaware of or have misunderstandings about hypertension are less likely to engage in these preventive measures. For example, Courtenay (2019) discovered that men who thought hypertension was predominantly driven by stress were less likely to pursue dietary or lifestyle adjustments to lower their risk. Instead, these men were more prone to rely on short-term stress relief measures like meditation or relaxation exercises, rather than addressing other important aspects like food or physical activity. This narrow focus on stress reduction may restrict the effectiveness of preventative efforts since men may not take the necessary actions to reduce their total risk of hypertension.

2.3 Theoretical Framework

Dorothea Orem's Self-Care Deficit Nursing Theory is one of the most commonly employed in nursing practice. It emphasizes on the patient's ability to care for themselves and the nurse's role in facilitating and improving that ability. Here's a thorough description of the theory:

Overview

Orem's theory is based on the belief that all individuals have a natural ability and responsibility to care for themselves and that they can recover more quickly and holistically if they are involved in their own care. The theory is divided into three related theories:

1. Theory of Self-Care
2. Theory of Self-Care Deficit
3. Theory of Nursing Systems

Key Concepts

1. Self-Care:

    Definition: Self-care refers to the activity's individuals perform on their own behalf to maintain life, health, and well-being.

    Components: Self-care includes actions like eating healthy, exercising, maintaining personal hygiene, and managing stress.

2. Self-Care Agency:

Definition: Self-care agency is the individual's ability to perform self-care activities. It involves knowledge, skills, motivation, and energy.

Factors Influencing Self-Care Agency: Age, developmental state, life experiences, sociocultural background, health, and available resources.

3. Therapeutic Self-Care Demand:

Definition: Therapeutic self-care demand is the total amount of self-care actions needed to meet self-care requisites and maintain health.

Requisites: These include universal self-care requisites (common to all humans), developmental requisites (related to developmental processes), and health deviation requisites (related to disease or injury).

4. Self-Care Deficit:

Definition: Self-care deficit occurs when an individual's self-care agency is insufficient to meet their therapeutic self-care demand.

Role of Nursing: Nurses identify self-care deficits and intervene to help patients meet their self-care demands.

5. Nursing Agency:

Definition: Nursing agency is the nurse's ability to design and implement a nursing plan of care to meet the patient's self-care needs.

Application in Hypertension Care

1. Assessment:

Determine the patient's knowledge about hypertension and its management.Assess the patient's ability to perform self-care activities like blood pressure monitoring, medication adherence, diet, and exercise.

2. Diagnosis:

Identify self-care deficits related to hypertension management, such as lack of knowledge about the condition, inability to follow dietary recommendations, or difficulty managing stress.

3. **Planning:**

Develop a care plan that addresses identified self-care deficits. Set realistic goals with the patient for managing hypertension.

4. **Implementation:**

Provide education about hypertension, its risks, and management strategies. Teach skills such as how to monitor blood pressure at home, read food labels for sodium content, and develop a regular exercise routine. Offer support for medication adherence, including creating a medication schedule or using reminders.

5. **Evaluation:**

Continuously assess the patient's progress in managing hypertension. Adjust the care plan as needed based on the patient's progress and feedback. Measure outcomes, such as changes in blood pressure, adherence to lifestyle changes, and overall health improvements.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0. Introduction

This chapter discussed the methods and procedures involved in data collection under the following sub heading; Research setting, target population, sample and sampling technique, instrument for data collection, data analysis and ethical consideration.

3.1. Research Design

This research was carried out using descriptive survey approach aimed at finding out the knowledge and perception of causes and prevention of hypertension amongst male patient in Kwara State University Teaching Hospital, Ilorin, Kwara State.

3.2 Study Setting

The study was conducted at Kwara State Teaching Hospital, Ilorin, Kwara State. It is one of the secondary health care institutions owned by the Kwara State government. It is situated along Surulere area opposite Queen Elizabeth Secondary School. It was established in 1957, during the colonial era in Nigeria. It was leased to the federal government after Nigeria's independence in 1960. The hospital was used by the university of Ilorin for medical and healthcare training until 2010, serving as a tertiary facility during this time. Upon the completion of the permanent site for the university of Ilorin teaching hospital, the hospital was returned to the state government. Between 2011 and 2012, it underwent extensive renovations, and was renamed General Hospital Ilorin, and functioned as a secondary health care facility. In June 2024, the

hospital was upgraded back to tertiary status and renamed Kwara State University Teaching Hospital. It now serves as a major referral center in Kwara State

The Hospital provides total quality of care that guarantees patient satisfaction. It provides service to the community through the following units and department. General Outpatient Department (GOPD), Patients Records Office, Family Planning Unit, Laboratory Department, Pharmacy Department, Accident and Emergency Department, Emergency Pediatric Unit, Operating Room, Dialysis Unit, Neonatal Intensive Care Unit, Pediatric Unit, Surgical, Medical, Psychiatric and Obstetrics Departments.

3.3 Target Population

This research work is exclusively restricted to the male patient of Kwara State University Teaching Hospital in the general out patient department (GOPD), kwara state

3.4 Sample and Sampling Techniques

The study employs random sampling technique based on readily available respondent willing to participate to administer 100 questionnaires to the male patients in Kwara state university teaching hospital Ilorin, Kwara State. The Respondents were approached individually, the purpose of the research was explained to them and their consent gained. The sample size for this study is 100 male patients

Sample size Determination

The sample size was determined using Cochran's formula

$$n = \frac{z^2 \times P\,(1-P)}{e^2}$$

Where;

n is the sample size

N is Study Population = 174

P is standard of deviation which is 0.5

e is the margin of error which is 0.05

The confidence score is 95%

Z is the z score which is which is 1.96

$$n0 = \frac{(1.96)^2 \times 0.5\,(1-0.5)}{0.05^2}$$

$$n0 = \frac{3.8416 \times 0.25}{0.25^2}$$

$$n0 = \frac{0.9604}{0.0025}$$

$$n0 = 384.16$$

$n0 \sim 384.16$

Applying finite population correction

$$n = \frac{n0 \times N}{n0 + N - 1}$$

$$n = \frac{384.16 \times 174}{384.16 + 174 - 1}$$

n = 120 respondents

To accommodate for potential attrition, an attrition rate of 16.7% was applied:

Adjusted sample size = 120× (1 - 0.1667)

= 120 × 0.8333

= 100

Therefore, a total of 100 participants were included in the final sample used for the study.

3.5 Instrument of Data Collection

The tools that were used for data collection consists of standardized and validated questionnaire which are composed of sections

SECTION 1: Demographic data comprising of six item questions

SECTION 2: knowledge on hypertension

SECTION 3: perception on hypertension

3.6 Validity of Instruments

Content Validity

Expert panel evaluations determined the content validity indices for the HKQ and HPQ, which were 0.85 and 0.88, respectively. These ratings show that experts strongly agree that the items in each questionnaire are relevant to the fields of hypertension knowledge and perception. By integrating the HKQ and HPQ, this survey has a broader scope, covering both factual knowledge about hypertension and subjective views toward the condition. The strong content validity of both instruments strengthens the combined questionnaire's suitability for extensively examining the primary areas of concern in this investigation.

3.7 Reliability of Instrument

The Internal consistency, as measured by Cronbach's alpha, was 0.81 for the Hypertension Knowledge Questionnaire and 0.84 for the Hypertension Perception Questionnaire, indicating good dependability in both instrument's item responses. A Cronbach's alpha greater than 0.70 is widely accepted in social science research, showing that the items in each questionnaire measure their respective constructs cohesively. By integrating these two instruments, the study maintains high internal consistency, guaranteeing that each item contributes to a cohesive assessment of hypertension knowledge and perception. The test-retest reliability scores for the

Hypertension Knowledge Questionnaire and Hypertension Perception Questionnaire were 0.85 and 0.82, respectively, after a two-week delay. These findings suggest a high level of stability in responses across time, which supports the instrument's consistency in measuring hypertension knowledge and perceptions. This consistency is especially crucial in health-related research, as dependable measurements enable precise tracking of participants' attitudes and knowledge.

3.8 Method of Data Collection

In order to gain access to the respondents and gain their cooperation, an introductory letter was collected from the school. Copies of the questionnaire were administered to the respondents after introducing the research topic to the selected subjects. Information on the importance of their consent was explained before the administration of the questionnaire and they were reassured that all divulged information shall be kept confidential. The questionnaire was administered to the subjects on individualized basis and filled under the supervision of the researcher and they were retrieved immediately by the researcher.

3.9 Method of Data Analysis

Data collected was analyzed using descriptive statistics for research questions in form of simple frequency tables such as pie-chart, bar chart, histogram and inferential statistics for research hypothesis using chi square

3.10 Ethical Consideration

An introductory letter was obtained from the school authority to serve as legal backing and to prove that the research is mainly for academic purpose. Confidentiality was

strictly maintained. The respondent's consent was sought and they were adjourned to answer the questions sincerely.

CHAPTER FOUR

DATA ANALYSIS AND INTERRETATION

4.0 Introduction: This chapter contains the presentation of data collated and analyzed from the questionnaires administered on Knowledge and Perception of patients on the causes and prevention of hypertension in Kwara State University Teaching Hospital, Ilorin, Kwara State.

4.1 SECTION A: Demographic Data of Respondents

Variables		**Frequency**	**Percentage**
Age	16–20	21	21.0
	21–25	36	36.0
	26 –30	19	19.0
	31 and above	24	24.0
	Total	**100**	**100.0**
Gender	Male	**100**	100.0
	Total	**100**	**100.0**
Marital Status	Married	31	31.0
	Single	49	49.0
	Divorced	12	12.0
	Widowed	8	8.0
	Total	**100**	**100.0**
Religion	Christianity	53	53.0
	Islam	36	36.0

	Others	11	11.0
	Total	**100**	**100.0**
Educational Level	Primary	3	3.0
	Secondary	11	11.0
	Tertiary	65	65.0
	Illiterate	21	21.0
	Total	**100**	**100.0**
Occupation	Civil servant	9	9.0
	Entrepreneur	50	50.0
	Apprentice	26	26.0
	Tailor	15	15.0
	Total	**100**	**100.0**

Table 4.0 Among the respondents, the age group 21–25 had the highest representation at 36%, followed by 31 and above at 24%, 16–20 at 21%, and 26–30 at 19%. This implies a majority of young adults, with a lesser presence of older individuals.

All respondents were male, with no female or unspecified gender preferences indicated. This implies a gender homogeneity in the sample.

Most participants were single (49%), while 31% were married, 12% divorced, and 8% widowed. This indicates a greater prevalence of single individuals among respondents.

Christianity was the predominant religion at 53%, with Islam at 36%, and other religions constituting 11%. This suggests a majority Christian sample with significant Islamic representation.

In terms of education, the majority of respondents had tertiary education (65%), followed by illiterates (21%), secondary (11%), and primary (3%). This shows a generally well-educated population with some educational disparities.

Occupation-wise, half of the respondents were entrepreneurs (50%), with apprentices at 26%, tailors at 15%, and civil servants at 9%. This suggests a predominance of self-employed individuals, with fewer in formal civil service.

4.2 SECTION B

Answering Research Question

Research Question One: What is the level of knowledge among patients regarding the causes and risk factors associated with hypertension?

Table 4.1: What is hypertension

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High blood sugar	45	45.0	45.0	45.0
	High blood pressure	37	37.0	37.0	82.0
	High cholesterol	9	9.0	9.0	91.0
	Heart disease	9	9.0	9.0	100.0
	Total	100	100.0	100.0	

Source: Field Survey, 2024

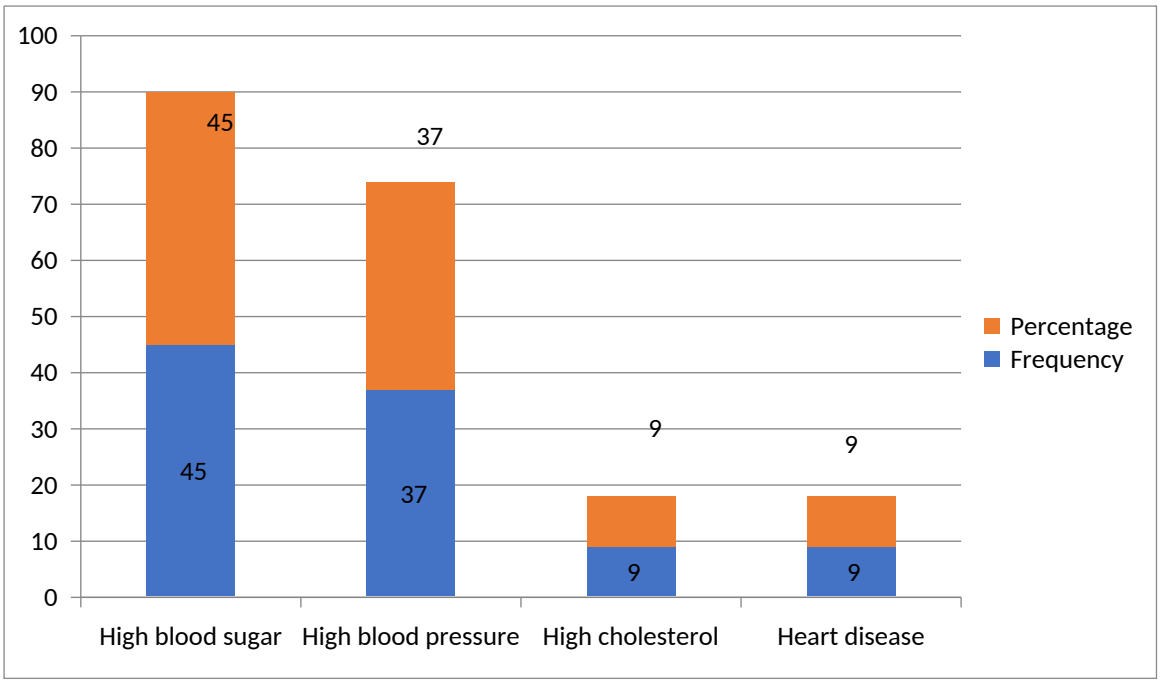

Fig 4.1: chart showing frequency distribution of respondents on "what is hypertension"

The table reveals that 45% of respondents incorrectly identify hypertension as high blood sugar, while 37% correctly recognize it as high blood pressure, with 9% each mistakenly associating it with high cholesterol and heart disease, indicating widespread confusion about the medical definition of hypertension.

Table 4.2: What is the primary risk factor for developing hypertension

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Family history	39	39.0	39.0	39.0
	Obesity	9	9.0	9.0	48.0
	Smoking	27	27.0	27.0	75.0
	Physical inactivity	25	25.0	25.0	100.0
	Total	100	100.0	100.0	

Source: Field Survey, 2024

The table shows that 39% of respondents identify family history as the primary risk factor for developing hypertension, followed by 27% who point to smoking, 25% who cite physical inactivity, and 9% who believe obesity is the main factor, suggesting that

most recognize genetic predisposition, but lifestyle factors like smoking and inactivity are also commonly acknowledged.

Table 4.3: Which of the following increases blood pressure?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Regular exercise	5	5.0	5.0	5.0
	Healthy diet	5	5.0	5.0	10.0
	Stress	80	80.0	80.0	90.0
	Adequate sleep	10	10.0	10.0	100.0
	Total	100	100.0	100.0	

Source: Field Survey, 2024

The table shows that 5% of respondents mistakenly believe a healthy diet increases blood pressure, 5% think regular exercise does, while 80% correctly identify stress as a factor that raises blood pressure, and 10% erroneously point to adequate sleep, indicating misconceptions about the contributors to high blood pressure.

Table 4.4: What is the relationship between sodium intake and hypertension?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High sodium intake decreases blood pressure	20	20.0	20.0	20.0
	High sodium intake increases blood pressure	26	26.0	26.0	46.0
	Sodium intake has no effect on blood pressure	25	25.0	25.0	71.0
	Unknown	29	29.0	29.0	100.0
	Total	100	100.0	100.0	

Source: Field Survey, 2024

The table reveals that only 26% of respondents correctly identify that high sodium intake increases blood pressure, while 29% are unsure, 25% believe sodium has no effect, and 20% mistakenly think high sodium intake decreases blood pressure, highlighting a lack of understanding about the link between sodium consumption and hypertension.

Table 4.5: Which age group is most likely to develop hypertension?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-39 years	22	22.0	22.0	22.0
	40-59 years	20	20.0	20.0	42.0
	60 years and older	22	22.0	22.0	64.0
	All ages equally	36	36.0	36.0	100.0
	Total	100	100.0	100.0	

Source: Field Survey, 2024

The table indicates that 36% of respondents believe that hypertension can develop equally across all age groups, while 22% each identify the age groups of 20-39 years and 60 years and older as most likely to develop hypertension, and 20% point to the 40-59 years group, reflecting a prevalent misconception that age does not significantly influence the risk of developing hypertension.

Research Question Two: What is the extent of patients understanding of preventive measures that can reduce the risk of developing hypertension

Table 4.13: What complication can result from uncontrolled hypertension?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Heart attack	27	27.0	27.0	27.0
	Stroke	16	16.0	16.0	43.0
	Kidney disease	28	28.0	28.0	71.0
	All of the above	29	29.0	29.0	100.0
	Total	100	100.0	100.0	

Source: Field Survey, 2024

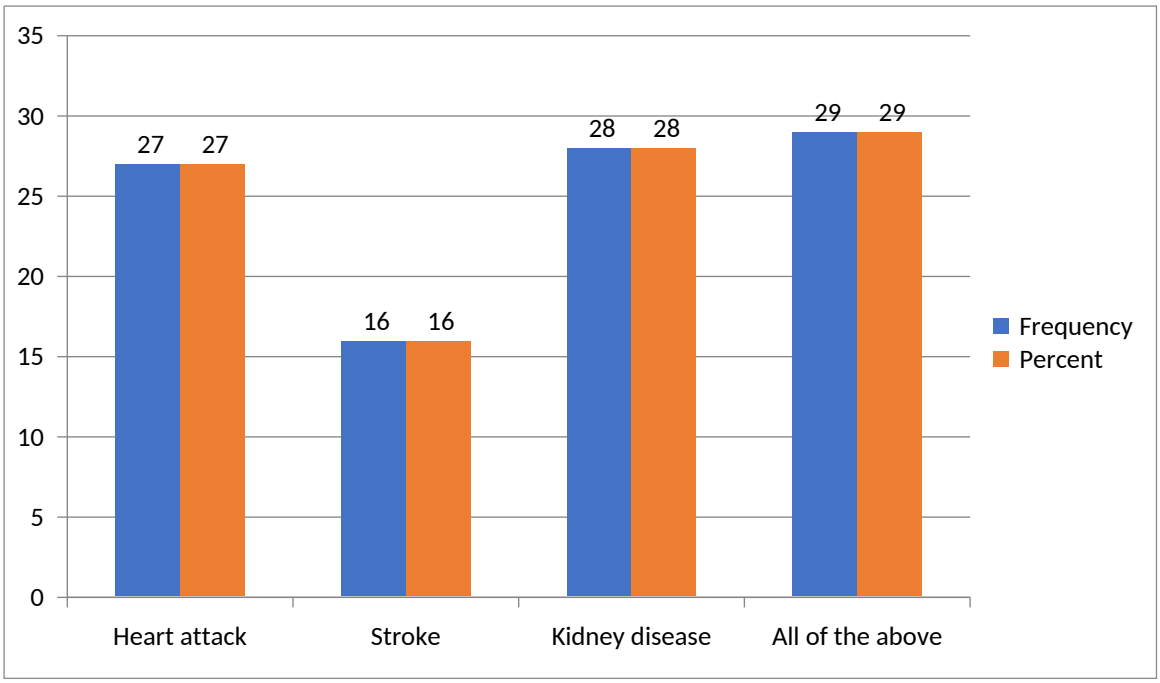

Fig 4.3: chart showing frequency distribution of respondents on "What complication can result from uncontrolled hypertension"

The table indicates that 29% of respondents correctly identify those complications from uncontrolled hypertension can include heart attack, stroke, and kidney disease, while 28% specifically point to kidney disease, 27% cite heart attack, and 16% mention stroke, reflecting a good understanding of the serious health risks associated with uncontrolled hypertension, although a notable number also acknowledge the comprehensive risks as a collective.

Table 4.14: What organ is most affected by uncontrolled hypertension?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Heart	32	32.0	32.0	32.0
	Brain	34	34.0	34.0	66.0
	Kidneys	22	22.0	22.0	88.0
	Eyes	12	12.0	12.0	100.0
	Total	100	100.0	100.0	

Source: Field Survey, 2024

The table shows that 34% of respondents believe that the brain is the organ most affected by uncontrolled hypertension, followed closely by 32% who identify the heart, 22% who point to the kidneys, and 12% who mention the eyes, indicating a general awareness of the major organs impacted by hypertension, with the brain and heart being recognized as the most critical.

Table 4.15: How does hypertension affect cardiovascular health?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Increases risk of heart attack	40	40.0	40.0	40.0
	Increases risk of stroke	21	21.0	21.0	61.0
	Increases risk of heart failure	15	15.0	15.0	76.0
	All of the above	24	24.0	24.0	100.0
	Total	100	100.0	100.0	

Source: Field Survey, 2024

The table indicates that 40% of respondents recognize that hypertension increases the risk of heart attack, while 24% acknowledge that it can elevate the risk of heart attack, stroke, and heart failure collectively, and 21% believe it specifically increases the risk of stroke, with 15% identifying heart failure as a concern, reflecting a solid understanding of the various cardiovascular risks associated with hypertension, though there remains some variation in specific recognition of these risks.

Table 4.16: What is the relationship between hypertension and kidney disease?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hypertension increases risk of kidney disease	23	23.0	23.0	23.0
	Hypertension decreases risk of kidney disease	22	22.0	22.0	45.0
	No relationship	45	45.0	45.0	90.0
	Unknown	10	10.0	10.0	100.0
	Total	100	100.0	100.0	

Source: Field Survey, 2024

The table reveals that 45% of respondents incorrectly believe there is no relationship between hypertension and kidney disease, while 23% correctly identify that hypertension increases the risk of kidney disease, and 22% mistakenly think it decreases this risk, indicating a significant misunderstanding about the connection between hypertension and kidney health, with a predominant perception that there is no association.

Table 4.17: How does hypertension affect cognitive function?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Increases risk of dementia	56	56.0	56.0	56.0
	Decreases risk of dementia	15	15.0	15.0	71.0
	No effect	15	15.0	15.0	86.0
	Unknown	14	14.0	14.0	100.0
	Total	100	100.0	100.0	

Source: Field Survey, 2024

The table indicates that 56% of respondents correctly acknowledge that hypertension increases the risk of dementia, while 15% incorrectly believe it decreases the risk, another 15% assert that it has no effect on cognitive function, and 14% are unsure, demonstrating a strong awareness of the negative impact of hypertension on cognitive health, although there are notable misconceptions among a minority of respondents.

Research Question Three: What barriers do patients face in adopting preventive strategies for hypertension ?

Table 4.24: How much do you know about hypertension?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Nothing	38	38.0	38.0	38.0
	Partially	3	3.0	3.0	41.0
	Slightly	30	30.0	30.0	71.0

	Much	7	7.0	7.0	78.0
	A lot	22	22.0	22.0	100.0
	Total	100	100.0	100.0	

Source: Field Survey, 2024

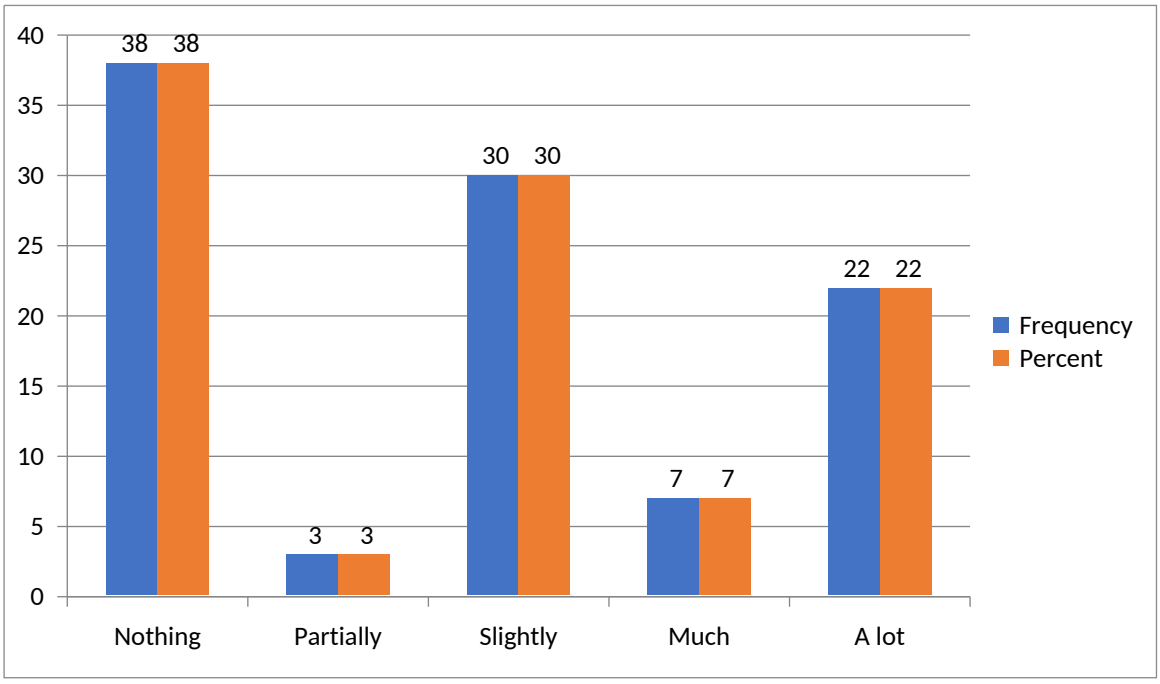

Fig 4.5: chart showing frequency distribution of respondents on "how much do you know about hypertension".

The data indicates that a significant portion of respondents (38%) reported knowing "nothing" about hypertension, while 30% claimed to know "slightly," 22% stated they know "a lot," 7% reported knowing "much," and only 3% considered their knowledge to be "partial"; this suggests a substantial lack of awareness and understanding of hypertension among the majority, which may hinder effective prevention and management strategies within the community.

Table 4.25: How worried are you about the consequences of hypertension?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not worried at all	44	44.0	44.0	44.0
	Not worried	29	29.0	29.0	73.0
	Slightly worried	7	7.0	7.0	80.0

	worried	8	8.0	8.0	88.0
	Very worried	12	12.0	12.0	100.0
	Total	100	100.0	100.0	

Source: Field Survey, 2024

The responses reveal that a considerable majority of participants (73%) expressed little to no concern about the consequences of hypertension, with 44% indicating they are "not worried at all" and 29% stating they are "not worried." In contrast, only 8% reported feeling "worried," and 12% were "very worried." This distribution suggests a potential disconnect between awareness of hypertension and concern about its serious health implications, which may affect individuals' motivations to adopt preventive measures or seek medical advice.

Table 4.26: How effective do you think regular exercise is in preventing hypertension?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not effective at all	55	55.0	55.0	55.0
	Not effective	17	17.0	17.0	72.0
	Slightly effective	7	7.0	7.0	79.0
	effective	13	13.0	13.0	92.0
	Very effective	8	8.0	8.0	100.0
	Total	100	100.0	100.0	

Source: Field Survey, 2024

The survey results indicate a prevalent skepticism regarding the effectiveness of regular exercise in preventing hypertension. A significant majority of respondents, totaling 72%, believe that exercise is either "not effective" (17%) or "not effective at all" (55%). Only a minority perceive exercise as beneficial, with 21% acknowledging it as

"effective" (13%) or "very effective" (8%). This overwhelming skepticism could hinder public health initiatives aimed at promoting physical activity as a critical strategy for hypertension prevention. It suggests a need for enhanced education on the health benefits of regular exercise and its specific role in managing blood pressure.

Table 4.27: How important is a healthy diet in preventing hypertension?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not important at all	21	21.0	21.0	21.0
	Not important	26	26.0	26.0	47.0
	Slightly important	21	21.0	21.0	68.0
	important	9	9.0	9.0	77.0
	Very important	23	23.0	23.0	100.0
	Total	100	100.0	100.0	

Source: Field Survey, 2024

The data indicates that a significant portion of respondents (47%) views a healthy diet as either not important or only slightly important in preventing hypertension, while only 32% acknowledge its importance, implying a general underestimation of the critical role that dietary habits play in hypertension prevention and overall cardiovascular health.

Table 4.28: How effective do you think stress management is in preventing hypertension?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not effective at all	26	26.0	26.0	26.0
	Not effective	21	21.0	21.0	47.0
	Slightly effective	17	17.0	17.0	64.0
	effective	14	14.0	14.0	78.0
	Very effective	22	22.0	22.0	100.0
	Total	100	100.0	100.0	

Source: Field Survey, 2024

The data shows that a majority of respondents (47%) consider stress management as either not effective or only slightly effective in preventing hypertension, while only 36% believe it is effective or very effective, suggesting a prevalent skepticism regarding the importance of stress management in hypertension prevention and its potential impact on cardiovascular health.

Table 4.29: How confident are you in managing your blood pressure?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not effective at all	43	43.0	43.0	43.0
	Not effective	12	12.0	12.0	55.0
	Slightly effective	18	18.0	18.0	73.0
	effective	11	11.0	11.0	84.0
	Very effective	16	16.0	16.0	100.0
	Total	100	100.0	100.0	

Source: Field Survey, 2024

The results indicate that a significant portion of respondents (55%) feel that they are either not effective or only slightly effective in managing their blood pressure, while only 27% express confidence in their ability to manage it effectively, highlighting a general lack of self-efficacy in blood pressure management among the surveyed individuals.

4.3 Test of Hypotheses

Hypothesis One: There is no significant relationship between knowledge and the causes of hypertension among male patients at Kwara State Teaching Hospital

Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	64.695[a]	9	.000
Likelihood Ratio	76.958	9	.000
Linear-by-Linear Association	1.139	1	.286
N of Valid Cases	100		

a. 7 cells (43.8%) have expected count less than 5. The minimum expected count is 1.87.

The Chi-Square test indicates a significant association between the variables tested, as evidenced by the Pearson Chi-Square value of 64.695 with a p-value of .000, suggesting that the observed frequencies differ from the expected frequencies. Hence, the null hypothesis is rejected ($P < 0.05$). Therefore, the study agreed that male patients at Kwara State University Teaching Hospital have significant knowledge of the causes of hypertension.

Hypotheses Two: There is no significant relationship between male patients' perception of hypertension prevention and their adherence to preventive practices at Kwara State University Teaching Hospital.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	20.246[a]	9	.016
Likelihood Ratio	24.621	9	.003
Linear-by-Linear Association	4.272	1	.039
N of Valid Cases	100		

a. 7 cells (43.8%) have expected count less than 5. The

minimum expected count is 1.54.

The Chi-Square Tests reveal a statistically significant association among the variables examined, indicated by a Pearson Chi-Square value of 20.246 with a p-value of .016, which suggests that the observed frequencies significantly differ from what would be expected under the null hypothesis. Hence, the null hypothesis is rejected ($P < 0.05$). Therefore, the study agreed that there is a significant relationship between male patients' perception of hypertension prevention and their adherence to preventive practices at Kwara State University Teaching Hospital.

CHAPTER FIVE

5.1 Discussion of Findings

The results reveal that male patients at Kwara State University Teaching Hospital had considerable knowledge on the causes and risk factors linked to hypertension. This corresponds with contemporary evidence indicating that health literacy concerning chronic conditions, such as hypertension, is increasing among individuals who regularly engage with healthcare practitioners (Abdullahi et al., 2023). Numerous patients recognize the influence of lifestyle factors—such as excessive sodium consumption, obesity, physical inactivity, and tobacco use—on the onset of hypertension. Nonetheless, the study also revealed deficiencies in comprehending more intricate risk factors, including genetic predisposition and comorbidities such as diabetes (Salako et al., 2022). These gaps underscore the necessity of ongoing patient education initiatives, especially with inherited and concomitant risk factors that patients can neglect.

Male patients in this study exhibited diverse perspectives regarding the severity and controllability of hypertension, despite their understanding of its origins. Certain patients underestimated the long-term health consequences, assuming that hypertension could be effectively treated without enduring lifestyle modifications or adherence to medication (Osunlusi et al., 2023). This aligns with findings from earlier studies indicating that patients regard hypertension as less life-threatening than other chronic diseases (Adewuyi & Taiwo, 2023). Some people continue to have the erroneous belief that hypertension can be "cured" by transitory lifestyle changes instead of being handled as a chronic condition. This emphasises the necessity of conveying that hypertension necessitates continuous therapy to avert serious complications such as stroke or heart disease.

The research indicates that the majority of male patients recognise prevalent preventive

strategies, including consistent physical activity, dietary adjustments, and stress reduction techniques. Nonetheless, patients' comprehension of the efficacy of these preventative measures differs, with some undervaluing the significance of consistent monitoring and compliance with prescribed medicine (Bello et al., 2022). Preventive strategies such as restricting alcohol intake and sustaining a healthy body weight were acknowledged but not consistently prioritized in practice. This corresponds with the idea that although knowledge may exist, the conversion of this knowledge into preventive measures remains a difficulty for numerous patients (Omotoso et al., 2023).

This study concentrates on male patients; however, literature evaluating gender differences in knowledge and perception of hypertension indicates that female patients frequently see hypertension as a more dangerous condition (Akinbobola et al., 2023). Nonetheless, male patients, as demonstrated in this study, exhibit greater awareness of particular risk factors, particularly those associated with lifestyle, yet may undervalue the necessity for sustained preventative strategies. This indicates that interventions ought to be gender-sensitive, recognizing that male patients may gain from focused education highlighting the chronicity of hypertension and the importance of continuous therapy (Adeoye & Balogun, 2023).

5. Obstacles to Implementing Preventive Strategies and Their Impact on Health-Seeking Behavior

The results underscore several obstacles encountered by male patients in implementing preventive measures. Socioeconomic factors, including drug costs and healthcare access, greatly affect adherence to preventive behaviours (Adeola et al., 2022). Moreover, time limitations, particularly for individuals in labour-intensive jobs, hinder

patients from consistently participating in physical exercise or attending follow-up sessions (Olaitan et al., 2023). The research also recognises cultural views as an additional obstacle, wherein patients may favour traditional treatments over contemporary medical counsel, resulting in postponements in pursuing treatment or implementing preventive strategies (Oladokun & Bello, 2022). These obstacles collectively hinder adherence to preventative measures and affect patients' health-seeking behaviours, frequently leading to more advanced disease progression prior to seeking treatment.

In summary, although male patients at Kwara State University Teaching Hospital possess considerable information regarding the causes of hypertension, there are deficiencies in their understanding of the condition's severity and its long-term care. Despite their awareness of preventive measures, practical obstacles impede their continuous implementation. The study underscores the necessity of customised educational initiatives that rectify misconceptions, emphasise the persistent nature of hypertension, and surmount the social and cultural obstacles that hinder preventative health practices.

5.2 Identifying Key findings

The following findings were discovered in the course of the study:

i. Male patients at Kwara State University Teaching Hospital exhibit significant knowledge of the causes and risk factors of hypertension, particularly lifestyle-related factors.

ii. Despite their knowledge, many male patients hold misconceptions about the seriousness and chronic nature of hypertension, affecting their perception of the disease's manageability.
iii. Awareness of preventive measures such as regular exercise and dietary changes is high, but barriers like socioeconomic constraints and cultural beliefs impede their consistent adoption.
iv. There is a significant relationship between male patients' perceptions of hypertension prevention and their adherence to recommended preventive practices, though practical and cultural obstacles limit full compliance.

5.3 Implication of the findings

The results of this study have significant significance for public health policy and clinical practice, especially with the management of hypertension in male patients. The elevated awareness among patients of the causes and risk factors of hypertension indicates that educational efforts and awareness initiatives in healthcare environments have been somewhat effective. The enduring prevalence of misunderstandings regarding the severity and controllability of hypertension suggests that teaching initiatives must be more thorough. Healthcare practitioners must emphasise the persistent nature of hypertension and the imperative for sustained management, while also rectifying any misconceptions. This highlights the necessity for ongoing patient education that transcends fundamental information, stressing the enduring consequences of inadequate hypertension management and the significant health risks, such as stroke and heart disease (Bello et al., 2022). Furthermore, the study's results indicate that although awareness of preventive measures is very high, obstacles such as economical restrictions, time constraints, and cultural attitudes considerably hinder the implementation of these measures. This has

significant implications for treatments at both the individual and community levels. Public health strategies must be formulated to mitigate these obstacles by enhancing the accessibility and affordability of preventive interventions. Interventions such as subsidizing antihypertensive drugs, enhancing access to regular medical examinations, and advocating for work-life balance through adaptable health programs could enhance patient compliance with preventive measures (Adeola et al., 2022). Culturally responsive health campaigns that honor and include local beliefs while advocating for evidence-based medical practices may mitigate resistance to the adoption of contemporary preventative techniques.

The notable correlation identified between patients' perceptions of hypertension prevention and their compliance with preventative measures underscores the necessity of fostering positive health attitudes. This indicates that public health efforts must prioritize not only the transmission of knowledge but also the modification of attitudes and perceptions regarding hypertension. Behavioral therapies, such motivational interviewing and cognitive-behavioral therapy, may be included into clinical practice to enhance patients' sense of hypertension management, consequently improving adherence to preventive measures (Omotoso et al., 2023). By concentrating on patient views and attitudes, healthcare professionals can cultivate a more proactive strategy for hypertension prevention and control, resulting in improved health outcomes.

The finding of substantial socioeconomic and cultural obstacles to the implementation of preventative methods underscores the necessity for health equity programs. Policymakers must acknowledge that merely imparting knowledge is inadequate without addressing the structural and social determinants of health. Hypertension prevention initiatives must be comprehensive, addressing both individual behaviors and the overarching socioeconomic circumstances that impede access to care. This may

encompass activities such as broadening healthcare coverage, enhancing access to nutritious food options, and establishing community-based programs that provide support for lifestyle changes, particularly in underserved regions (Adewuyi & Taiwo, 2023).

5.4 Implications of findings to Nursing

The following are considered to be implication of findings to Nursing Profession:

i. It is imperative that nurses improve patient education programs to avoid misconceptions regarding the gravity of hypertension and stress the importance of long-term care.

ii. In order to prevent hypertension, nursing interventions should address socioeconomic and cultural obstacles by offering easily available and culturally appropriate assistance.

iii. Nurses want to incorporate behavioral modification strategies, including motivational interviewing, to enhance patients' attitudes towards prevention of hypertension and compliance with treatment protocols.

iv. The results emphasize the necessity for nurses to support health equity by making sure that all patients, regardless of socioeconomic background, have access to preventive resources and care.

v. To guarantee early identification and constant control of the ailment, nurses should place a high priority on routine monitoring and follow-up care for patients with hypertension.

vi. According to the findings, nurses should work with other medical specialists to develop interdisciplinary interventions that address lifestyle and medication elements of managing hypertension.

vii. In order to deliver evidence-based care and keep current on the most recent guidelines for managing hypertension, nurses must engage in ongoing professional development.

5.5 Limitation of the Study

One of the major limitations in this study is that the results could not accurately reflect the wider patterns of hypertension awareness and prevention in the general community due to the research' limited demographic coverage. Furthermore, the study was carried out in a particular geographic and cultural setting, which can have a different impact on patient attitudes and behaviours than it would in other parts of Nigeria or other nations. For the purpose of improving the generalisability of the results, future research should broaden the sample to encompass a variety of gender and geographic populations.

An additional constraint is to the dependence on self-reported information in evaluating patients' attitudes, beliefs, and actions about hypertension. Biases such social desirability bias, in which patients exaggerate their knowledge or adherence to preventive measures to appear more knowledgeable or compliant than they actually are, can be introduced into self-reported data. This might have had an impact on the findings' accuracy, especially when it came to the patients' stated knowledge of preventive measures and treatment adherence. Furthermore, the research did not include objective measures of patient behaviour or clinical evaluations, such as blood pressure monitoring or medicine adherence tracking, which could have yielded more specific information about how well the individuals' hypertension was managed. A mixed-methods approach could be beneficial for future study, providing a more

comprehensive view of hypertension understanding and management by combining objective health data with qualitative self-reports.

5.6 Summary of the study

This study aimed to investigate the knowledge and perception of male patients regarding the causes and prevention of hypertension at Kwara State University Teaching Hospital. The research examined several key areas, including patients' understanding of the causes and risk factors of hypertension, their awareness of preventive measures, and their perceptions of the condition's seriousness and manageability. Additionally, the study explored the barriers that patients face in adopting preventive strategies, such as socioeconomic constraints and cultural beliefs. Through a structured questionnaire and data analysis, the findings revealed that while male patients had substantial knowledge of hypertension causes, misconceptions about its severity and manageability persisted, impacting their adherence to preventive practices.

The study also found a significant relationship between patients' perceptions of hypertension prevention and their actual adherence to preventive strategies. Barriers such as financial limitations, cultural attitudes, and lack of access to healthcare resources were identified as factors that hindered the effective management of hypertension among the patients. These findings have important implications for public health interventions, suggesting that while knowledge of hypertension is present, more emphasis should be placed on correcting misconceptions, improving access to preventive resources, and addressing social and economic barriers to healthcare. The study highlights the need for targeted, culturally sensitive educational programs and

comprehensive healthcare policies that promote the long-term management of hypertension.

5.7 Conclusion

The study concluded by showing the importance of knowledge and perception in the effective management and prevention of hypertension among male patients at Kwara State University Teaching Hospital. While the findings reveal that patients possess a substantial understanding of the causes and risk factors of hypertension, persistent misconceptions about the condition's seriousness and manageability highlight the need for more focused educational interventions. Additionally, barriers such as socioeconomic constraints and cultural beliefs significantly impact patients' ability to adopt and adhere to preventive strategies.

Addressing these challenges requires a multi-faceted approach that integrates patient education, improved access to healthcare resources, and culturally sensitive interventions. Healthcare providers, especially nurses, must play a pivotal role in correcting misinformation, promoting healthy behaviors, and advocating for policy changes that remove obstacles to hypertension prevention and management. Tis is feasible implementing these strategies, better health outcomes and reduced hypertension-related complications can be achieved, ultimately enhancing the quality of life for hypertensive patients.

5.8 Recommendations

The following recommendations were made based on findings:

i. Healthcare providers should enhance educational programs to correct misconceptions about hypertension and emphasize its long-term manageability.

ii. Hospitals and clinics should provide more accessible and affordable preventive healthcare services, including regular blood pressure checks and counseling.

iii. Culturally sensitive health campaigns should be developed to address local beliefs and promote the adoption of modern hypertension prevention strategies.

iv. Nurses should incorporate behavioral interventions, such as motivational interviewing, to improve patients' adherence to hypertension prevention practices.

v. Policymakers should prioritize health equity by expanding healthcare coverage and ensuring access to preventive resources, particularly for low-income populations.

vi. Further research should explore gender differences in hypertension knowledge and management to develop tailored interventions for both male and female patients

5.9 Suggestion for Further Studies

The following recommendations were made for further studies:

i. Future studies should explore the knowledge and perception of hypertension among female patients to provide a more comprehensive understanding of gender differences in hypertension management.
ii. Research should investigate the role of socioeconomic status in adherence to hypertension prevention practices across different regions of Nigeria.
iii. Further studies should examine the impact of cultural beliefs and traditional health practices on hypertension management in various ethnic groups.
iv. A longitudinal study could be conducted to assess the long-term effectiveness of educational interventions on hypertension prevention and control among patients.
v. Future research should incorporate clinical measurements, such as blood pressure monitoring, alongside self-reported data to gain a more accurate picture of patients' hypertension management practices.

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APPENDIX

QUESTIONNAIRE

Faculty of Nursing Sciences,

Thomas Adewumi University,

Oko, Kwara-State, Nigeria.

Dear Respondents,

I am conducting a study on "The Knowledge and Perception of the causes and prevention of hypertension among male patients in Kwara State University Teaching Hospital Ilorin." I kindly invite you to participate by completing the attached questionnaire. Your responses will significantly contribute to understanding the factors influencing compliance with standard precautions and identifying ways to improve it.

Please note the following:

- Your participation is entirely voluntary, and you are not obligated to take part.
- By completing the questionnaire, you are providing informed consent to participate in this study.
- All information you provide will be kept confidential, and your responses will remain anonymous, as you are not required to include your name.
- You have the right to withdraw from the study at any time.

INSTRUCTIONS.

The questionnaire is divided into three sections, each with several questions, some of which have multiple choice answers.

I appreciate your cooperation.

SECTION 1

DEMOGRAPHIC DATA

1. Age:
A. 16-20years ( ) B.. 21-25 years ( ) C. 26-30 years ( ) D. 31 years and above ( )
2. Sex:

A. Male ( )
3. Marital status:

A. Married ( ) B. Single ( ) C. Divorced ( ) D. Widowed ( )

4. Religion:
A. Christianity ( ) B. Islam ( ) C. Others specify ( )

5. Educational Level:
A. Primary ( ) B. Secondary ( ) C. Tertiary ( ) D. Illiterate ( )

6. Occupation:
A. Civil servant ( ) B. Apprentice ( ) C. Entrepreneur ( ) D. Tailor ( )

Here are the complete Hypertension Knowledge Questionnaire (HKQ) and Hypertension Perception Questionnaire (HPQ) together:

Hypertension Knowledge and Perception Questionnaire

Section 2: Knowledge (HKQ, 20 questions)

1**. What is hypertension?**

a) High blood sugar ( ) b) High blood pressure ( ) c) High cholesterol ( ) d) Heart disease ( )

2. **What is the primary risk factor for developing hypertension?**

a) Family history ( ) b) Obesity ( ) c) Smoking ( ) d) Physical inactivity ( )

3. Which of the following increases blood pressure?

a) Regular exercise ( ) b) Healthy diet( ) c) Stress ( ) d) Adequate sleep ( )

4. What is the relationship between sodium intake and hypertension?

a) High sodium intake decreases blood pressure ( ) b) High sodium intake increases blood pressure ( ) c) Sodium intake has no effect on blood pressure ( ) d) Unknown ( )

5. Which age group is most likely to develop hypertension?

a) 20-39 years ( ) b) 40-59 years ( ) c) 60 years and older ( ) d) All ages equally ( )

6. What lifestyle change can help prevent hypertension?

a) Regular exercise ( ) b) Healthy diet ( ) c) Stress management ( ) d) All of the above ( )

7. How often should blood pressure be checked?

a) Daily ( ) b) Weekly ( ) c) Monthly ( ) d) Annually ( )

8. What medication is commonly used to treat hypertension?

a) Diuretics ( ) b) Beta blockers ( ) c) ACE inhibitors ( ) d) All of the above ( )

9. What is the recommended blood pressure target for individuals with hypertension?

a) <120/80 mmHg ( ) b) <130/80 mmHg ( ) c) <140/90 mmHg ( ) d) <150/100 mmHg ( )

10. How effective is weight loss in reducing blood pressure?

a) Very effective ( ) b) Somewhat effective ( ) c) Not effective ( ) d) Unknown ( )

11. What is the role of potassium in blood pressure management?

a) Increases blood pressure ( ) b) Decreases blood pressure ( ) c) No effect on blood pressure ( ) d) Unknown ( )

12. How important is medication adherence in managing hypertension?

a) Very important ( ) b) Somewhat important ( ) c) Not important ( ) d) Unknown ( )

13. What complication can result from uncontrolled hypertension?

a) Heart attack ( ) b) Stroke ( ) c) Kidney disease ( ) d) All of the above ( )

14. What organ is most affected by uncontrolled hypertension?

a) Heart ( ) b) Brain ( ) c) Kidneys ( ) d) Eyes ( )

15. How does hypertension affect cardiovascular health?

a) Increases risk of heart attack ( ) b) Increases risk of stroke ( ) c) Increases risk of heart failure ( ) d) All of the above ( )

16. What is the relationship between hypertension and kidney disease?

a) Hypertension increases risk of kidney disease ( ) b) Hypertension decreases risk of kidney disease ( ) c) No relationship ( ) d) Unknown ( )

17. How does hypertension affect cognitive function?

a) Increases risk of dementia ( ) b) Decreases risk of dementia ( ) c) No effect ( ) d) Unknown ( )

18. What is the impact of hypertension on quality of life?

a) Significant impact ( ) b) Moderate impact ( ) c) Minimal impact ( ) d) No impact ( )

19. How does hypertension affect mental health?

a) Increases risk of depression ( ) b) Decreases risk of depression ( ) c) No effect ( ) d) Unknown ( )

20. What is the economic burden of hypertension?

a) High healthcare costs ( ) b) Lost productivity ( ) c) Both ( ) d) Unknown ( )

Section 3: Perception (HPQ, 15 questions)

(1-5 scale: 1=Not serious at all, 5=Very serious)

Not serious at all (1), Not serious (2)Slightly serious, (3) Serious (4), Very Serious (5)

21. How serious do you think hypertension is?

Not serious at all ( ), Not serious ( )Slightly serious, ( ) Serious ( ), Very Serious ( )

22. How concerned are you about developing hypertension?

Not concerned at all ( ), Not concerned ( )Slightly concerned, ( ) concerned ( ), Very concerned ( )

23. How likely do you think you are to develop hypertension?

Not Likely at all ( ), Not likely ( )Slightly likely, ( ) likely ( ), Very likely ( )

24. How much do you know about hypertension?

Nothing *( ), Partially ( )Slightly ( ) Much ( ), A lot( )*

25. How worried are you about the consequences of hypertension?

Not worried at all *( ), Not worried ( )Slightly worried ( ) worried ( ), Very worried ( )*

26. How effective do you think regular exercise is in preventing hypertension?

Not effective at all *( ), Not* effective *( )Slightly* effective *( )* effective *( ), Very* effective *( )*

27. How important is a healthy diet in preventing hypertension?

Not important at all *( ), Not* important *( )Slightly* important *( )* important *( ), Very* important *( )*

28. How effective do you think stress management is in preventing hypertension?

Not effective at all *( ), Not* effective *( )Slightly* effective *( )* effective *( ), Very* effective *( )*

29. How confident are you in managing your blood pressure?

Not effective at all *( ), Not* effective *( )Slightly* effective *( )* effective *( ), Very* effective *( )*